RISE OF FFA

Trends found among patients experiencing hair loss

INGRID TORJESEN | Staff Correspondent

Frontal fibrosing alopecia, which was first reported 30 years ago, is a condition that is increasing in epidemic proportions, said Terry Shapiro, M.D., in a presentation at the International Society for the Study of Hair Disorders annual meeting.

“The band of alopecia is often readily distinguishable from the sun damaged skin of the forehead,” Dr. Shapiro said.

Loss of the eyebrows is a common and helpful diagnostic feature affecting 50% to 95% of individuals with frontal fibrosing alopecia, he said.

Biopsies for foot infections

CARPE

antiperspirant

HYPERHIDROSIS RELIEF OVER THE COUNTER

GRAB A FREE SAMPLE PACK FOR YOU AND YOUR PATIENTS

at md.carpelotion.com

With 15% aluminum sesquichlorohydrate delivered in a non-irritating, non-greasy lotion, Carpe is clinically proven to reduce sweating, and formulated for the hands and feet!

Available at ❤CVS pharmacy

Carpe Lotion is an over the counter (OTC) antiperspirant lotion for sweaty hands and feet, ranging from mild situational sweating to severe palmar and plantar hyperhidrosis. Carpe has been clinically tested and proven to be 100% non-irritating, as well as highly effective.
RISE OF FFA

Trends found among patients experiencing hair loss

INGRID TORJESEN | Staff Correspondent

F
rontal fibrosing alopecia, which was first reported 30 years ago, is a condition that is increasing in epidemic proportions, said Jerry Shapiro, M.D., in a presentation at the 2018 AAD Summer Meeting.

Frontal fibrosing alopecia is a patterned variant of lichen planopilaris and predominantly affects postmenopausal women. However, around 20% of cases occur in premenopausal women and the condition sometimes occurs in men (1-2% of cases), said Dr. Shapiro who is director of disorders of hair and scalp, New York University School of Medicine.

The condition typically occurs on the frontotemporal region of the scalp, but periauricular and occipital localization (hair loss behind the ears) are also common, and in some cases the band of alopecia stretches around the head completely (circumferential fibrosing alopecia).

“The band of alopecia is often readily distinguishable from the sun damaged skin of the forehead,” Dr. Shapiro said.

Loss of the eyebrows is a common and helpful diagnostic feature affecting 50% to 95% of individuals with frontal fibrosing alopecia, he added. “It can either precede or follow the onset of scalp hair loss.”

“Lonely hairs” are also frequently evident in the band of hair loss, he said.

The distinction between frontal fibrosing alopecia and lichen planopilaris is primarily clinical, as the histologic findings for both conditions are essentially identical, although perifollicular inflammation tends to be less intense in FFA CONTINUES ON PAGE 55.

25% of Dr. Shapiro’s practice consists of treating frontal fibrosing alopecia.

Helping a dermatopathologist diagnose neoplasms and infections of the foot requires taking adequate samples and including clinical photographs, physicians reported at DERMtool 2018. (Photo courtesy of Clay J. Cockerill, M.D.)

FULL STORY ON PAGE 60.

Malpractice stress

Put the risk of a malpractice lawsuit into perspective

LISETTE HILTON | Staff Correspondent

All physicians are vulnerable to malpractice claims. While claims don’t always lead to court cases, they can lead to stress, says Stephen E. Wolverton, M.D., a dermatologist with Indiana University Health in Bloomington, Ind. He has served as an expert witness for medicolegal cases since 1993.

Dr. Wolverton has had personal experience with malpractice lawsuits. He’s been sued twice, but both cases were dropped before settlement or before going to court. One case was brought by a patient who experienced an adverse event after consuming excessive doses of prednisone for bullous pemphigoid. The second was brought by a patient who sought a second-opinion from Dr. Wolverton about the safety of the long-term use of methotrexate for plaque psoriasis. The patient sued both the primary physician and Dr. Wolverton for adverse events he experienced with long-term methotrexate use.

Although malpractice suits can cause a great deal of stress, dermatologists are actually sued less.

Malpractice continues on page 92.
"Dermatology Times is guided by a core group of trusted physician experts who review meetings, suggest topics and sources; and conduct interviews."
Unsightly veins: erased.

Pigmented lesions: eliminated.

Unwanted hair: gone.

No matter the task at hand, choose the proven pro.

GentleMax® Pro

Adding 20 years of expertise to your practice.

GentleMax Pro is the backbone of thousands of practices worldwide - helping medical practitioners confidently treat unwanted hair, pigmented lesions and unsightly veins - all with a single device. Thanks to two decades of continuous innovation and the proven, powerful combination of its 755 nm Alexandrite and 1064 nm Nd:YAG lasers, GentleMax Pro has become the go-to solution for practices looking to increase patient satisfaction while maximizing practice success.

Learn how GentleMax Pro can help your practice at syneron-candela.com/na/gentle
One of the most interesting changes I have observed is the use of artificial hair. The resurgence of fashionable fake hair is an interesting phenomenon.

False eyelashes were a must-have fashion statement in the 1960s and disappeared for almost 50 years, only to become a staple of newscasters in 2018. I did a survey of false eyelash use among female cable and network television reporters, and I discovered that 100% of the ladies were wearing some configuration of false eyelashes.

Why the rediscovery of this Max Factor invention? I think it is due to high-definition TV. With traditional resolution, you can see the eyes of the female reporter, but not her eyelashes. High-definition TV allows visualization of such detail that every lash can be seen. As a matter of fact, I could determine the lash configuration each lady was wearing. The most popular lashes were upper eyelid demi-lashes — this is a style in which the artificial lashes close to the inner canthus are shorter and become progressively longer toward the lateral canthus. In my opinion, the ladies wearing the eyelash prostheses had more dramatic and alluring eyes.

It is amazing to consider that eyelash hair patterns may be dictated by advancements in digital TV cameras and the increased resolution of LED monitors. So, the false eyelash industry is booming because someone noticed that light could be emitted in various wavelengths by a diode. Then, someone noticed that these LEDs could be organized in banks to create a complex image with more diodes creating a more detailed picture. Then, someone came up with the idea that pictures could be digitized by creating pixels of information that could be disassembled and subsequently reassembled to transmit images electronically over long distances. And, this is why we now have renewed false eyelash popularity.

Have you also noticed that many of the same female reporters also sport very long thick scalp hair? Observe that the hair is very thick at the ends and holds a very nice bouncy curl. Is it real? Of course, not! However, long hair has been a sign of femininity and overall systemic health. So, similar to the renewed popularity of false eyelashes, you can see every hair on the head of female newscasters, and these long lush locks become important.

Is the use of fake hair a problem? Not really, when you know it is fake. It could become a problem if this image becomes representative of the “ideal” woman.

I now have women coming into my office wanting to grow impossibly long eyelashes and impossibly long thick hair. They believe they have a hair disorder because their eyelashes will not grow as long as their favorite TV talk show personality, even with the use of prescription eyelash growth products. I try to explain that beautiful high definition TV eyelashes and scalp hair are most certainly augmented, but this is not the answer the patient desires. I add that they, too, could use false eyelashes and hair extensions, but they should prepare to lose some of their own hair due to adhesive problems and hair breakage. Remember, even high definition TV is not all it seems.

Fake hair, electronics and fashion

by DR. ZOE DIANA DRAELOS

Dr. Draelos is a clinical and research dermatologist with Dermatology Consulting Services, High Point, N.C. and a consulting professor of dermatology, Duke University School of Medicine, Durham, N.C.

High-definition TV allows visualization of such detail that every lash can be seen.
NewSurg - UV

FDA Approved Targeted Narrow Band UV-B and UV-A (PUVA) Phototherapy
For the in-office treatment of Psoriasis, Vitiligo and Eczema ...

Do you pay $10,000 / year for excimer laser warranties and service?
Do you give 50% of your treatment revenue to your excimer laser company?

Psoriasis Before UV-B Phototherapy  Psoriasis After UV-B Phototherapy
Vitiligo Before UV-B Phototherapy  Vitiligo After UV-B Phototherapy

FDA Approved
Manufactured in USA
Both UV-B and UV-A (PUVA)
Advanced Treatment Handpiece
Treats Psoriasis / Eczema / Vitiligo

Compact and Portable
No Maintenance Needed
Safe and Simple Operation
Green Technology - No Gas Exchange Required
Three Year Warranty on Parts and Labor

The Affordable Solution for Dermatologists!

NewSurg
Enlightening Dermatology

Phone: (215) 822-7722
Email: sales@newsurg.com
Website: NewSurg.com
CMS proposes new reimbursement guidelines - Are they kidding?

by DR. NORMAN LEVINE, M.D.

Dr. Levine is a private practitioner in Tucson, Ariz.

A new Centers for Medicaid and Medicare Services plan for payment for evaluation and management services (E/M) has been proposed and CMS is currently accepting comments through 5 p.m., Sept. 10. The new rules would apply to all E/M services delivered after Jan. 1, 2019.

The gist of the new rules is that there would be only one E/M category for any service with at least an E/M level of the present 99202 for new patients or 99212 for return patients. The payment would be about $135 for new office visits regardless of the complexity of the service rendered and about $93 for return visits. For example, an oncologist seeing a new cancer patient with all of the difficulties of reviewing the old medical records, doing a complete examination and ordering appropriate laboratory tests would be paid the same as a dermatologist evaluating someone with a seborrheic keratosis.

The rationale for this change in payment is that there will be a reduced paperwork burden on the treating medical practitioner, since every little detail would not need to be documented in the medical record in order to maximize payment. According to CMS officials, this would allow physicians more time to spend with their patients. They estimate that these new rules would save an estimated 51 hours of clinic time per year.

CMS reports that very few physicians will realize major changes in income, although a few specialties will be affected differently than the others. Supposedly, obstetricians would benefit greatly while dermatologists, rheumatologists and pediatricians would be the most adversely affected.

Let us start the analysis of this plan by examining the ways in which it might impact dermatology. In spite of the predictions of lower incomes for dermatologists, it is my view that most of us will benefit handsomely financially. I do not know how other dermatologists bill for E/M services, but I cannot recall a single instance where I have ever been paid $135 for an initial evaluation. Under the proposed plan, I will almost certainly earn more money.

CMS’s proposed retooling of ACOs getting mixed reviews

By JEFFREY BENDIX

THE MEDICARE SHARED SAVINGS PROGRAM (MSSP) was conceived under the Affordable Care Act as a way to reduce Medicare spending without diminishing the quality of patient care. But the program hasn’t produced the expected savings since its launch in 2012, so the Trump Administration is proposing a dramatic makeover.

CMS Administrator Seema Verma recently proposed a new rule that would make it harder for accountable care organizations (ACOs)—the vehicles for participating in the MSSP—to realize the financial benefits of participating in the program without also taking on more financial risk. “We are proposing significant changes to increase quality for patients and drive toward program-wide savings,” Verma wrote in a Health Affairs blog post accompanying the announcement.

Reaction to Verma’s announcement so far has been mixed. The National Association of ACOs is strongly opposed, calling it “a significant setback for Medicare payment reform.” But the CEO of a private company active in the ACO field sees some benefits to the rule. If CMS adheres to its typical timetable for rule adoption, it would likely take effect late this year or in early 2019.

ACOs consist of hospitals, medical practices and/or other providers that band together to care for an assigned group of Medicare beneficiaries, with the goal of providing the care for less than what the government projects it would cost under Medicare’s fee-for-service program. ACOs that achieve the goal within Medicare’s quality standards share some of the savings with the government. Those whose costs exceed government benchmarks face financial penalties.

An ACO’s financial risk and reward varies according to which of the program’s three “tracks” it chooses. Track 1 ACOs receive a smaller share of any savings, but are not penalized for higher-than-projected costs.
The Only FDA Approved
Clobetasol Propionate 0.025%

IMPOYZ™ (clobetasol propionate) Cream 0.025% is indicated for the treatment of moderate to severe plaque psoriasis in patients 18 years of age and older.¹

IMPORTANT SAFETY INFORMATION

Warnings and Precautions
Topical corticosteroids, including IMPOYZ Cream can cause reversible hypothalamic-pituitary-adrenal (HPA) axis suppression with the potential for glucocorticosteroid insufficiency. This may occur during treatment or after withdrawal of treatment. This may require that patients be evaluated periodically for evidence of HPA axis suppression. Factors that predispose to HPA axis suppression include, use of high-potency steroids, large treatment surface areas, prolonged use, use of occlusive dressings, altered skin barrier, liver failure, and young age. If HPA axis suppression occurs, gradually withdraw the drug, reduce frequency of application, or substitute with a less potent corticosteroid. If signs and symptoms of withdrawal occur, systemic corticosteroids may be required. Recovery of HPA axis function is generally prompt and complete upon discontinuation of topical corticosteroids. Although rare, systemic effects of topical corticosteroids may manifest as Cushing’s syndrome, hyperglycemia, and glucosuria. Pediatric patients may be more susceptible to systemic toxicity because of their larger skin surface to body mass ratios. Local Adverse Reactions with Topical Corticosteroids - Local adverse reactions from topical corticosteroids may be more likely to occur with occlusion, prolonged use, or use of higher potency corticosteroids. Some local adverse reactions may be irreversible. Concomitant Skin Infections - Use an appropriate antimicrobial agent if a skin infection is present or develops. If appropriate, discontinue use of IMPOYZ Cream. Allergic Contact Dermatitis - Allergic contact dermatitis with corticosteroids is usually diagnosed by observing failure to heal rather than noting a clinical exacerbation. Adverse Events - The adverse reaction that occurred in at least 1% of subjects treated with IMPOYZ Cream and at a higher incidence than in subjects treated with vehicle cream was application site discoloration (2% versus 1%). Less common local adverse events occurring in < 1% of subjects treated with IMPOYZ Cream were application site atrophy, telangiectasia and rash.

¹. Impoyz Cream full Prescribing Information. CL81214 4/18

Please see Brief Summary of Prescribing Information on the following page.
INDICATIONS AND USAGE
IMPOYZ Cream 0.025% is indicated for the treatment of moderate to severe plaque psoriasis in patients 18 years of age and older.

DOSAGE AND ADMINISTRATION
Apply a thin layer of IMPOYZ Cream to the affected skin areas twice daily and rub in gently and completely. Use IMPOYZ Cream for up to 2 consecutive weeks of treatment. Treatment beyond 2 consecutive weeks is not recommended, and the total dosage should not exceed 50 g per week because of the potential for the drug to suppress the hypothalamic-pituitary-adrenal (HPA) axis [see Warnings and Precautions (5.1)]. Discontinue IMPOYZ Cream when control is achieved. Do not use if atrophy is present at the treatment site. Do not bandage, cover, or wrap the treated skin area unless directed by a physician. Avoid use on the face, scalp, axilla, groin, or other intertriginous areas. IMPOYZ Cream is for topical use only. It is not for oral, ophthalmic, or intravaginal use. Wash hands after each application.

DOSAGE FORMS AND STRENGTHS
IMPOYZ Cream, 0.025%: each gram contains 0.25 mg of clobetasol propionate in a white to off-white cream base.

CONTRAINDICATIONS
None.

WARNINGS AND PRECAUTIONS
Effects on the Endocrine System: IMPOYZ Cream can cause reversible hypothalamic-pituitary-adrenal (HPA) axis suppression with the potential for glucocorticoid insufficiency. This may occur during treatment or after withdrawal of treatment. Because of the potential for systemic absorption, use of topical corticosteroids, including IMPOYZ Cream, may require that patients be evaluated periodically for evidence of HPA axis suppression. Factors that predispose a patient to HPA axis suppression include the use of high-potency steroids, large treatment surface areas, prolonged use, use of occlusive dressings, altered skin barrier, liver failure, and young age. Evaluation of adrenal suppression may be accomplished with a 24-hour urine collection for 17-hydroxycorticosteroids or 17-Ketosteroids or an 8 a.m. plasma cortisol level. A dose of IMPOYZ Cream of 0.025%, when applied over 28% of the body surface area (BSA) for 28 consecutive days, resulted in suppression of endogenous ACTH stimulation test suggestive of HPA axis suppression was seen in 8 of 26 (30.8%) of subjects on IMPOYZ Cream. If HPA axis suppression is documented, gradually withdraw the drug, reduce the frequency of application, or substitute with a less potent corticosteroid. If signs and symptoms of steroid withdrawal occur, supplement systemic corticosteroids may be required. Recovery of HPA axis function is generally prompt and complete upon discontinuation of topical corticosteroids. Systemic effects of topical corticosteroids may also manifest as Cushing’s syndrome, hyperglycemia, and glucocorticoid. These complications are rare and generally occur after prolonged exposure to larger than recommended doses, particularly with high-potency topical corticosteroids. Use of more than one corticosteroid-containing product at the same time may increase the total systemic exposure to topical corticosteroids. Minimize the unwanted risks from endocutaneous effects by mitigating risk factors favoring increased systemic bioavailability and by using the product as recommended [see Dosage and Administration (2)]. Pediatric patients may be more susceptible to systemic toxicity because of their larger skin surface to body mass ratios [see Use in Specific Populations (8.4)].

Local Adverse Reactions with Topical Corticosteroids
Local adverse reactions from topical corticosteroids may include atrophy, striae, telangiectasia, burning, itching, irritation, dryness, folliculitis, acneiform eruptions, hyperpigmentation, perioral dermatitis, allergic contact dermatitis, secondary infection, and miliaria. These may be more likely to occur with occlusive use, prolonged use, or use of higher potency corticosteroids, including IMPOYZ Cream. These local adverse reactions may be irreversible.

Concomitant Skin Infections: Use an appropriate antimicrobial agent if a skin infection is present or develops. If a favorable response does not occur promptly, discontinue use of IMPOYZ Cream until the infection has been adequately treated. Allergic Contact Dermatitis: Allergic contact dermatitis with corticosteroids is usually diagnosed by observing failure to heal rather than noting a clinical exacerbation. Such an observation should be corroborated with skin patch diagnostic testing. If irritation develops, discontinue the topical corticosteroid and institute appropriate therapy.

ADVERSE REACTIONS
Clinical Trials Experience
Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug, and may not reflect the rates observed under the best possible medical care in clinical practice.

In an embryo-fetal development study in mice, subcutaneous administration of clobetasol propionate resulted in fetotoxicity at the highest dose tested (1 mg/kg) and malformations at the lowest dose tested (0.03 mg/kg). Malformations included cleft palate and skeletal abnormalities. In a rat embryo study, 28 sub-Saharan women using potent topical corticosteroids (27/28 used clobetasol propionate 0.05%) for skin lightening during pregnancy, noted a higher incidence of low birth weight infants in the cohort study, in which 28 sub-Saharan women using potent topical corticosteroids (27/28 used clobetasol propionate 0.05%) for skin lightening during pregnancy, noted a higher incidence of low birth weight infants in the exposed group. The majority of exposed subjects treated large areas of skin (a mean quantity of 60 g/month (range, 12-170g) over long periods of time. Data
Human Data
Multiple observational studies have not shown any association between the use of potent and very potent topical corticosteroids and congenital malformations, preterm delivery, or fetal mortality. However, when the dispensed amount of potent or very potent topical corticosteroid exceeded 300 g during the entire pregnancy, use was associated with an increase in low birth weight infants [adjusted RR, 7.74 (95% CI, 1.69-40.11)]. In addition, a small, short-term animal study, in which 28 sub-Saharan women using potent topical corticosteroids (27/28 used clobetasol propionate 0.05%) for skin lightening during pregnancy, noted a higher incidence of low birth weight infants in the exposed group. The majority of exposed subjects treated large areas of skin (a mean quantity of 60 g/month (range, 12-170g) over long periods of time.

Animal Data
In an embryo-fetal development study in mice, subcutaneous administration of clobetasol propionate resulted in fetotoxicity at the highest dose tested (1 mg/kg) and malformations at the lowest dose tested (0.03 mg/kg). Malformations included cleft palate and skeletal abnormalities. In an embryofetal development study in rabbits, subcutaneous administration of clobetasol propionate resulted in malformations at doses of 0.003 and 0.006 mg/kg. Malformations included cleft palate, craniosynostosis, and other skeletal abnormalities.

Lactation: Risk Summary
There is no information regarding the presence of clobetasol propionate in breast milk or its effects on the breastfed infant or on milk production. Systemically administered corticosteroids appear in breast milk and could suppress growth, interfere with endogenous corticosteroid production, or cause other untoward effects. It is not known whether topical administration of clobetasol propionate could result in sufficient systemic absorption to produce detectable quantities in human milk. The developmental and health benefits of breastfeeding should be considered along with the mother’s clinical need for IMPOYZ Cream and any potential adverse effects on the breastfed infant from IMPOYZ Cream or from the underlying maternal condition.

Immunosuppression:
Systemic absorption of corticosteroids, including clobetasol propionate, may cause alterations in the immune response, and may increase the potential for infection. Cases of fatal Candida sepsis and bacterial septicemia have been reported in patients receiving high doses of topical corticosteroids, including IMPOYZ Cream. Topical corticosteroids may also mask the signs of infections such as Cushing’s syndrome, linear growth retardation, delayed weight gain, and intracranial hypertension have been reported in pediatric patients, especially those with prolonged exposure to large doses of high potency topical corticosteroids. Local adverse reactions involving skin and for the shortest duration possible while breast feeding. Advising breast feeding women not to apply IMPOYZ Cream directly to the nipple and areola to avoid direct infant exposure.

Pediatric Use: The safety and effectiveness of IMPOYZ Cream in patients younger than 18 years of age have not been established; therefore, use in children younger than 18 years is not recommended. Because of a higher ratio of skin surface area to body mass, pediatric patients are at a greater risk than adults of systemic toxicity, including HPA axis suppression, when treated with topical drugs [see Warnings and Precautions (5.1)]. Rare systemic toxicities such as Cushing’s syndrome, linear growth retardation, delayed weight gain, and intracranial hypertension have been reported in pediatric patients, especially those with prolonged exposure to large doses of high potency topical corticosteroids. Local adverse reactions involving skin and for the shortest duration possible while breast feeding. Advising breast feeding women not to apply IMPOYZ Cream directly to the nipple and areola to avoid direct infant exposure.

Geriatic Use: Clinical studies of IMPOYZ Cream did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently from younger subjects. Other reported clinical experience with topical corticosteroids has not identified differences in responses between the elderly and younger patients. NONCLINICAL TOXICOLOGY: Carcinogenesis, Mutagenesis, Impairment of Fertility: Long-term animal studies have not been performed to evaluate the carcinogenic potential of clobetasol propionate cream. In a 13-week repeat dose toxicity study in rats, topically administered clobetasol propionate cream, 0.001, 0.005 and 0.025 % at corresponding doses of 0.004, 0.02 and 0.01 mg/kg/day resulted in corticosteroid class-related systemic effects such as reductions in body weight gain, reductions in total leukocytes, and individual white cells, decrease in weight of adrenal, thymus, spleen, liver and lung. Histologically, there were decreased hematopoiesis in the bone marrow, thymic atrophy and mast cell infiltration of the mesenteric lymph nodes. All these effects were indicative of severe immune suppression consistent with long-term exposure to corticosteroids. A no observable adverse effect level (NOAEL) was determined to be clobetasol propionate cream, 0.001% (0.004 mg/kg/day) in male rats while at 0.02 and 0.1 mg/kg/day in females. The clinical relevance of the findings in animals to humans is not clear, but sustained glucocorticoid-related immune suppression may increase the risk of infection and possibly the risk of carcinogenesis. Clobetasol propionate was not mutagenic in three different test systems: the Ames test, the Saccharomyces cerevisiae gene conversion assay, and the E. coli B WP2 fluctuation test. Fertility studies conducted in the rat following subcutaneous administration of clobetasol propionate at dosage levels up to 0.05 mg/kg/day revealed that females exhibited an increase in the number of resorbed embryos and a decrease in the number of living fetuses at the highest dose.
E/M changes: CMS may want to reconsider it’s proposed revisions FROM PAGE 8

E/M changes: CMS may want to reconsider it’s proposed revisions

tion, the clinic notes of most dermatologists will be much easier to prepare because I am pretty sure that most will no longer document the minimal abnormalities (skin tags, etc.), which currently invite a higher level of E/M service to be billed.

What happens when a patient with a complicated dermatologic problem consults with one of us? I now spend a fairly large portion of my time caring for these people. With the new rules, there might be a financial incentive to refer them to the local university dermatology department and let that institution struggle to remain financially viable with what would be a significant decrease in payment for the care that they deliver. Apparently, CMS has indicated that there will be “add-on payments,” mostly to primary care providers and “some others” to reduce the amount of lost income that they incur.

It appears that most dermatologists will benefit financially with this new system. But wait, I thought that medical care was supposed to be primary care providers and “some others” to reduce the amount of lost income that they incur.

It appears that most dermatologists will benefit financially with this new system. But wait, I thought that medical care was supposed to center around the needs of the patients and not around the best interests of medical practitioners. Let us consider a few worst-case scenarios:

- A patient with multiple dermatologic problems is informed that his physician will only address one issue per visit. This would certainly benefit the physician but could be a major hassle for the patient having to return multiple times to have all of his problems addressed, each time with a new co-pay.
- The new payment system promises that the physicians will have more time to spend on individual patient care. Although it would be nice to imagine that the doctor would use all of the time saved in documentation to spend on increased time and attention to each of his patients, I would guess that it is more likely that the physician will either leave work earlier each day or will see additional numbers of patients with the attendant increased income.
- A recent article in The New York Times about the E/M changes featured a few other possible unintended consequences with the new payment system. These might affect the entire medical care system.
- Many providers of complex medical services will stop participating in Medicare altogether. This would greatly reduce the options that many Medicare enrollees would have for quality care.
- Erroneous or fraudulent claims might be paid more often because physicians would be submitting less information to document the services provided (that is what “cutting red tape” is all about).
- Medical students will understand the long-term implications of the payment proposals and might choose against medical disciplines with high intensity encounters such as internal medicine or family medicine, the ones which will be most needed in the future.

As you can imagine, it is my view that the new E/M payment system will be a financial boon to most dermatologists but would be a disaster for our patients and for the medical care system as a whole. I am hopeful that the American Academy of Dermatology and other influential groups will persuade CMS to reconsider this poorly designed program.

ACOs: Public comments on the proposed rule accepted through Oct. 16 FROM PAGE 8

In a media briefing, Verma said ACOs shouldn’t be allowed to earn additional revenue without being at risk for any losses. “After six years of experience, the time has come to put real accountability in accountable care organizations,” she said, adding that the proposed changes would save Medicare an estimated $2.2 billion over the next 10 years.

CMS is proposing a July 1, 2019 start date for implementing the changes. ACOs whose contracts are due to expire at the end of 2018 would get a six-month extension.

The National Association of ACOs (NAACOS) reacted to the proposed rule with alarm, citing a survey it conducted earlier this year in which executives at many ACOs said they would leave the program rather than take on financial risk.

“ACOs are not ready can be forced to take on risk, given that the program is voluntary, NAACOS president and CEO Clif Gaus said in a written statement. “The more likely outcome will be that many ACOs quit the program, divest their care coordination resources and return to payment models that emphasize volume over value.”

But Farzad Mostashari, MD, co-founder and CEO of Aledade, a company that helps organize and manage ACOs, sees some benefits to the changes CMS is proposing, particularly in consolidating the participation tracks.

“The idea is to create a sequence where you start off basic and then they move you up,” he says. “You will be marched up this escalator until you reach the APM level with greater downside risk. I think letting ACOs sit for too long with no downside risk is not a good idea.”

Mostashari notes that the proposed rule includes data from 2016 comparing the performances of ACOs led by physicians to those led by hospitals, with physician-led ACOs saving about $500 million, and those led by hospitals saving virtually nothing.

“The conventional wisdom is that ACOs aren’t performing as well as expected,” he says. “It would be more correct to say that hospital-led ACOs aren’t performing well, but physician ACOs are doing quite well.”

CMS is accepting public comment on the proposed rule through October 16.
“Skin tightness is not related to cleanliness, but to skin barrier damage.”

Skin sensations

by DR. ZOE DIANA DRAELOS
Dr. Draelos is a consulting professor of dermatology, Duke University School of Medicine, Durham, N.C.

Q Is it healthy for skin to feel tight when you get out of the shower?
Many patients state that they do not feel clean unless their skin feels tight after exiting the shower. This tightness is not at all related to cleanliness, but rather to skin barrier damage and undesirable water evaporation. In reality, tight skin is damaged skin. I will explain the sequence of events.

Soap is an anionic surfactant with a high alkaline pH, which, in turn, causes swelling of the stratum corneum. This swelling allows unwanted deeper penetration of the soap into the skin possibly causing irritation and itching. Soap also binds to stratum corneum proteins further inducing swelling and hyperhydration of the skin. Following the completion of bathing, the excess water evaporates leading to skin tightness. Thus, tightness is a sign of skin dryness because soap binding reduces the ability of the skin proteins to hold water. This explains why continued use of the alkaline cleanser on a daily basis in conjunction with hot water can lead to eczematous skin disease.

Therapeutic anti-itch moisturizers will also contain menthol to replace the annoying itch with cooling. Menthol is also used in variety of formulations where noxious sensory stimuli are not present, such as acne preparations. Some OTC acne products contain menthol to create a tingling feeling post-application. The tingling feeling is used to appeal to young consumers who equate the tingle with product efficacy. Indeed, young people find a menthol-containing acne cream more effective than the same formulation without the menthol. Sensates play a large role in product perception and sales.

Q Why is menthol used in so many skincare products?
A whole area of skincare formulation is devoted to sensates. Sensates are substances that create a distinct feeling upon topical application. For example, male shaving preparations have long included menthol. It is unknown why the skin has menthol receptors, but the receptors are rapidly activated once menthol is applied topically. Most individuals will experience a cooling feeling with menthol, but a few will experience pain. Thus, there is variety in human response to sensates. Many men experience stinging and burning from tiny razor nicks post shaving. Menthol creates a cooling sensation when applied topically in most individuals. A menthol-containing shave cream will replace the stinging/burning with cooling, which is a more satisfying post-shave sensation. Menthol is also added to post-sunburn lotions to replace the burning sensation with a cooling sensation.

Q How are OTC itch relieving products evaluated?
It is sometimes challenging to develop itch products and assess multiple formulations for efficacy, since itch is a transient symptom that varies by person in its perception. One of the newer ways to standardize itch is to expose the skin to cowhage, an irritating plant. Most people will itch when their skin comes into contact with cowhage. Once the itch is induced, the itch relieving products can be applied to determine which one is most effective. While itch due to dermatologic disease differs from irritant-induced itch, cowhage exposure can be used as a screening tool for the cosmetic chemist.
VERSATILE. POWERFUL. ELEGANT.
THE NO-COMPROMISE TRIAMCINOLONE

TRIANEX® is the #1 prescribed branded topical triamcinolone."}

Widespread use
Nongreasy feel
Day/night use
No preservatives
No age restrictions
Large 430g jar

*Pediatric patients may demonstrate greater susceptibility to topical corticosteroid-induced HPA axis suppression and Cushing’s syndrome than mature patients because of a larger skin surface area to body weight ratio. Administration of topical corticosteroids to children should be limited to the least amount compatible with an effective therapeutic regimen.

IMPORTANT SAFETY INFORMATION
The most common adverse events with TRIANEX Ointment include burning, itching, irritation, dryness, and folliculitis. TRIANEX Ointment is contraindicated in patients who are hypersensitive to any of the ingredients of this product. As with all topical corticosteroids, systemic absorption can produce reversible HPA-axis suppression.

INDICATION
TRIANEX 0.05% (Triamcinolone Acetonide Ointment, USP) is indicated for the relief of the inflammatory and pruritic manifestations of corticosteroid-responsive dermatoses.

To report SUSPECTED SIDE EFFECTS, call Promius Pharma at 1-888-966-8766 or contact the FDA at 1-800-FDA-1088.

Please see Full Prescribing Information on adjacent page.

CLINICAL PHARMACOLOGY

Topical corticosteroids share anti-inflammatory, antipruritic and vasoconstrictive actions. The mechanism of anti-inflammatory activity of the topical corticosteroids is unclear. Various laboratory methods, including vasoconstrictor assays, are used to compare and predict potencies and/or clinical efficacies of the topical corticosteroids. There is some evidence to suggest that a recognizable correlation exists between vasoconstrictor potency and therapeutic efficacy in man.

Pharmacokinetics

The extent of percutaneous absorption of topical corticosteroids is determined by many factors including the vehicle, the integrity of the epidermal barrier, and the use of occlusive dressings. Topical corticosteroids can be absorbed from normal intact skin. Inflammation and/or other disease processes in the skin increase percutaneous absorption. Occlusive dressings substantially increase the percutaneous absorption of topical corticosteroids. Thus, occlusive dressings may be a valuable therapeutic adjunct for treatment of resistant dermatoses (see DOSAGE AND ADMINISTRATION). Once absorbed through the skin, topical corticosteroids are handled through pharmacokinetic pathways similar to systemically administered corticosteroids. Corticosteroids are bound to plasma proteins in varying degrees. Corticosteroids are metabolized primarily in the liver and are then excreted by the kidneys. Some of the topical corticosteroids and their metabolites are also excreted into the bile.

INDICATIONS AND USAGE

Triexan® 0.05% (Triamcinolone Acetonide Ointment, USP) is indicated for the relief of the inflammatory and pruritic manifestations of corticosteroid responsive dermatoses.

CONTRAINDICATIONS

Triexan® 0.05% (Triamcinolone Acetonide Ointment, USP) is contraindicated in those patients with a history of hypersensitivity to any of the components of the preparation.

PRECAUTIONS

General

Systemic absorption of topical corticosteroids has produced reversible hypothalamic-pituitary-adrenal (HPA) axis suppression, manifested by manifestations of Cushing’s syndrome, hyperglycemia, and glucosuria in some patients. Conditions which augment systemic absorption include the application of the more potent steroids, use over large surface areas, prolonged use, and the addition of occlusive dressings. Therefore, patients receiving a large dose of any potent topical steroid applied to a large surface area or under an occlusive dressing should be evaluated periodically for evidence of HPA axis suppression by using the urinary free cortisol and ACTH stimulation tests, and for impairment of thermal homeostasis. If HPA axis suppression or elevation of the body temperature occurs, an attempt should be made to withdraw the drug, to reduce the frequency of application, substitute a less potent steroid, or use a sequential approach when utilizing the occlusive technique. Recovery of HPA axis function and thermal homeostasis are generally prompt and complete upon discontinuation of the drug. Infrequently, signs and symptoms of steroid withdrawal may occur, requiring supplemental systemic corticosteroids. Occasionally, a patient may develop a sensitivity reaction to a particular occlusive dressing material or adhesive and a substitute material may be necessary. Children may absorb proportionally larger amounts of topical corticosteroids and thus be more susceptible to systemic toxicity (see PRECAUTIONS-Pediatric Use). If irritation develops, topical corticosteroids should be discontinued and appropriate therapy instituted. In the presence of dermatological infections, the use of an appropriate antifungal or antibacterial agent should be instituted. If a favorable response does not occur promptly, the corticosteroid should be discontinued until the infection has been adequately controlled.

These preparations are not for ophthalmic use.

Information for the Patient

Patients using topical corticosteroids should receive the following information and instructions:

1. This medication is to be used as directed by the physician. It is for external use only. Avoid contact with the eyes.
2. Patients should be advised not to use this medication for any disorder other than that for which it was prescribed.
3. The treated skin area should not be bandaged or otherwise covered or wrapped so as to be occlusive unless directed by the physician.
4. Patients should report any signs of local adverse reactions especially under occlusive dressing.
5. Parents of pediatric patients should be advised not to use tight-fitting diapers or plastic pants on a child being treated in the diaper area, as these garments may constitute occlusive dressings.

ADVERSE REACTIONS

The following local adverse reactions are reported infrequently with topical corticosteroids, but may occur more frequently with the use of occlusive dressings. These reactions are listed in an approximate decreasing order of occurrence:

- Burning, itching, irritation, dryness, folliculitis, hypertrichosis, acneiform eruptions.
- Hypopigmentation.
- Perioral dermatitis.
- Allergic contact dermatitis.
- Maceration of the skin.
- Hirsutism.

Secondary infection, skin atrophy, striae, and miliaria may occur more frequently with the use of occlusive dressings. These reactions are listed in an approximate decreasing order of occurrence:

Hypopigmentation, perioral dermatitis, allergic contact dermatitis, maceration of the skin, secondary infection, skin atrophy, striae, and miliaria.

OVERDOSAGE

Topically applied corticosteroids can be absorbed in sufficient amounts to produce systemic effects (see PRECAUTIONS).

Apply a thin film to the affected area two to four times a day.

Occlusive Dressing Technique

Occlusive dressings may be used for the management of psoriasis or other recalcitrant conditions. Apply a thin film of ointment to the lesion, cover with a pliable nonporous film, and occlude unless directed by the physician.

How Supplied

Triexan® 0.05% (Triamcinolone Acetonide Ointment, USP) is supplied in 430 g jars (NDC 67857-806-19).

KEEP THIS AND ALL DRUGS OUT OF THE REACH OF CHILDREN.

You may report side effects to FDA at 1-800-FDA-1088. You may also report side effects to Promius Pharma, LLC at 1-888-966-8766.

Store at 20° to 25°C (68° to 77°F). [See USP Controlled Room Temperature.]

DISPENSE IN A WELL-CLOSED CONTAINER.

Rx Only

For external use only. Not for ophthalmic use.

Distributed by: Promius Pharma, LLC Princeton, NJ 08540
Manufactured by: CMP Pharma, Inc. Farmville, NC 27828

Triexan is a registered trademark of CMP Pharma, Inc.

007850 Revised 0317
Dr. Xu is an instructor in dermatology at Northwestern University Feinberg School of Medicine, medical director, Center for Bio-Integrated Electronics, Simpson Querrey Institute for Bionanotechnology, Northwestern University and, co-founder, Advancing Innovation in Dermatology Accelerator Fund.

Dr. Ju is co-founder of Advancing Innovation in Dermatology, Inc. and co-founder of the Advancing Innovation in Dermatology Accelerator Fund.
While dermatologists are reportedly among the happier subspecialties in medicine, a little over one-third have reported feeling burned out, depressed or both, according to a survey conducted by Medscape. It’s not a surprise. The healthcare industry has been churning with change, and so have the physicians within.

Understanding this, we asked you to share your most pressing issues and information needs to ensure that we are providing the support and insight you need. Our recent surveys shed more light on what is on your mind.

While most dermatologists reported in our 2017 Dermatology Times State of the Specialty Survey that they would choose dermatology again (83%), a little over half (54%) stated that they were less optimistic than the previous year about their ability to provide adequate patient care. The top two challenges cited were “managing payer relationships, reimbursement, compensation” (46%) and “increased administrative work” (41%). More than half (57%) reported that their top focus area for office or practice over the next three to five years is to “increase practice efficiency.”

In our follow-up reader survey, you confirmed that, still, the most pressing issues facing your practice today include:
- Drug costs,
- Reimbursement,
- Preauthorization hurdles,
- Government regulations,
- EMR challenges, and
- Private equity takeovers.

These sentiments underscore results from Medscape’s Dermatologist Lifestyle Report 2018, in which more than two thirds of responding dermatologists (67%) pointed to “too many bureaucratic tasks (eg, charting, paperwork)” as a contributing factor to burnout, followed by 36% who reported “increasing computerization of practice (EHRs),” another third (29%) cited “government regulations,” and 25% cited “decreasing reimbursements.”

Thirty-one percent of dermatologists surveyed in Medscape’s 2018 Physician Wealth and Debt report 2018 cited “having so many rules and regulations” as the most challenging part of their job while another 21% said it was “difficulties getting fair reimbursement.”

One responder to our State of the Specialty Survey, said, “[There is] no time to take care of patients due to regulatory burdens.”

It comes as no surprise, then, that you noted the emerging issues you’d like to read more about included: EMRs, reimbursement, drug costs and shortages, and the use of extenders. You also mentioned a number of clinical topics.

When asked to rank the kinds of content you prefer to read, the top five responses in order were:
- Clinical research news,
- Practice management news,
- Product information,
- Industry news, and
- People on the move.

You also expressed interest in seeing developments from specific journals and conferences, so we plan to increase our coverage of those you listed.

We greatly appreciate your feedback. We’re committed to meeting your information needs, so our upcoming issues will include deep dives into the issues that you’ve highlighted. We are committed to evolving with our readers. As your needs change, so will our content—but we need your continued feedback and contributions. Let us know what keeps you up at night.

Email me at: heather.onorati@ubm.com

References
Discover the newest way to get the ink out!
Introducing Tattoo Eraser!

“Tattoo Eraser provides a viable, inexpensive treatment for tattoo removal with impressive clinical results. It is particularly useful for resistant tattoos with multiple colored inks.” - Tina Alster M.D.

www.theAmethod.com

Induction Therapies

FEATURING 28 UNIQUE SKINCARE PRODUCTS
NO OTHER COMPANY OFFERS!

PRIVATE LABELING AVAILABLE

MORE POWER,
MORE NEEDLES,
MORE DEPTH,
= MORE COLLAGEN!!

COLLAGEN P.I.N.
877.746.4407
www.inductiontherapies.com
#INDUCTIONTHERAPIES
Trip ends, journey begins

WE medical trip to India ends in eye-opening lessons learned

After 22 years in dermatology private practice—I went on part sabbatical, part locums work. I left my job last year to pursue travel, per diem dermatology work and experiences where I could combine travel with healthcare. Such an opportunity presented itself with WE Charity’s “Passion to Heal” program, which provides dermatology and ophthalmology care to children and adults in rural communities in Kenya and India. In February, my application was accepted and two months later, I was in rural India, specifically Rajasthan, where I stayed for 10 days.

Those who travel with the program like to say, “The journey begins when the trip ends.” This is my journey.

OUR MEDICAL EXPERIENCE

WE set up a clinic in a private school in Rajasthan where seven physicians, three physician assistants and three medical assistants from the United States joined a team already on the ground.

We began treating patients immediately and, gradually, I found that I was becoming a different kind of practitioner. I entered the program with the expectation that I would be treating skin disorders, but in the end, I was assessing overall health and well-being, offering general medical care, including — among other things — treating intestinal worms in children. This was initially met with some fear on my part. I felt that I may not be able to offer adequate care outside of my traditional scope of practice. But now, I realize that my fears were unfounded, and I have tremendous gratitude for this.

“\[I\] rediscovered the purity of the doctor-patient relationship. Here, I wasn’t a physician bogged down with worry about malpractice or charting.”

— Anna Sarno Ryan, M.D.
THE BEST AND WORST STATES FOR HEALTHCARE

88 PERCENT of the U.S. population has regular access to healthcare, shows an analysis by WalletHub, which, in August, released its 2018 Best and Worst States for Health Care list.

WalletHub compared 50 states and the District of Columbia across 40 key measures of healthcare cost, accessibility and outcome. Their analysis shows that at $290 per patient, Massachusetts has the lowest average monthly health-insurance premium, which is 3.6 times lower than that of Alaska — the state with the highest average monthly healthcare premium: $1,041.

California has the highest retention rate for medical residents, 70.4%, which is 4.3 times higher than in the District of Columbia which came in at the lowest at 16.4%.

Vermont has the lowest number of infant mortalities three per 1,000 live births which compares to Alabama, which came in at the highest at nine per 1,000 live births.

At 9%, West Virginia has the lowest share of at-risk adults without a routine doctor visit in the past two years. This is 1.9 times lower than Oregon which came in at the highest at 16.9%.

To view the full report and your state or the District’s rank, please visit: http://bit.ly/2KQFoWt

FDA TO CONSIDER OMADACYCLINE

IN OCTOBER, the Food and Drug Administration is expected to decide on the approval of omadacycline (Paratek Pharmaceuticals) for the treatment of acute bacterial skin and skin structure infections, and community-acquired bacterial pneumonia.

In August, the Paratek announced that the FDA’s Antimicrobials Drug Advisory Committee voted in favor of approving omadacycline, which is a tetracycline that has been developed in both intravenous and oral forms.

“Omadacycline has the potential to help address the urgent and growing need for new antibiotics to treat serious community-acquired infections. With once-daily dosing and bioequivalent intravenous and oral formulations, omadacycline may help facilitate early discharge from the hospital or, in other cases, allow for safe and effective treatment in the outpatient setting,” said Michael F. Bigham, chairman and CEO, Paratek. “Today’s recommendations from the Advisory Committee move us one step closer to making this important new treatment option available to patients and physicians. We look forward to working with the FDA as it considers the comments from the committee members and completes its review of the omadacycline new drug applications.”

The FDA based its decision on findings from three phase three studies on acute bacterial skin and skin structure infections, and community-acquired bacterial pneumonia. In all three studies, omadacycline met all primary and secondary efficacy outcomes and was considered generally safe and well-tolerated.

ALMIRALL STRENGTHENS ITS PLACE IN U.S. MARKET

PHARMATIMES reported in August that the Spanish company Almirall acquired Allergan’s U.S. dermatology portfolio for $650 million.

The deal includes acne medications Aczone (dapsone), Tazorac (tazarotene) and Azelaic (azelaic acid), plus the dermatosis drug Cordran Tape (fluorocorticoid) and the new anti-inflammatory SeysaraTM (sarecycline) for acne vulgaris.

“This is a transformational deal for Almirall,” said the company’s CEO Peter Guenter. “It will reinforce and consolidate our position in the world’s largest dermatology market and is a well-balanced portfolio of mature and growth brands with a major launch opportunity of an innovative New Chemical Entity (NCE). It offers us medium to long term top and bottom line growth opportunities. Moreover, it will allow for an expanded platform to launch KX2-391, which has the potential to become a new standard of care in actinic keratosis.”

Sales for the newly developed SeysaraTM is expected to reach $200 million, the company stated. By comparison, the four other drugs generated $70 million in sales in the U.S. from January-July 2018.

“With this acquisition, Almirall consolidates and reinforces its presence in the US, the largest market in the world, and expands its range of dermatological products, representing a transformational step for Almirall US as well as Almirall as a whole,” the company added.
THE LIGHTWEIGHT LOTION THAT WORKS LIKE CREAM

Superior hydration vs CeraVe Moisturizing Cream*
Fragrance-free, ceramide-enriched formula for everyday use
Clinically proven moisture barrier improvement‡

*Study design: Double-blind, bilateral, 10-day clinical comparative study to assess the efficacy of Eucerin Advanced Repair Lotion vs CeraVe Moisturizing Cream.

‡Significant difference between treatments, p<0.05.
§Significant difference from baseline, p<0.001.
FDA MOVES TO STEM DRUG SHORTAGES

THE FOOD AND DRUG ADMINISTRATION is exploring ways to prevent long-term drug shortages, including the possibility of supporting the importation of more drugs to address drug shortages in the United States.

The agency is setting up a work group to explore policy frameworks that would allow for increased drug importation of “medically important” medications. This would address challenges when the drug suddenly becomes unavailable from the sole manufacturer or there are significant price increases in the medication.

“Any policy that involves the importation of drugs would be temporary until adequate competition enters these categories. Furthermore, any resulting policy would also be narrowly tailored in order not to create the same risks of counterfeits or other unsafe drugs getting into the U.S. supply chain as a broader importation policy would present,” said FDA Commissioner Scott Gottlieb, M.D., in a statement.

The agency’s ultimate goal is to seek multiple FDA-approved and marketed versions of each medically important drug for which there are no blocking patents or other exclusivities, Dr. Gottlieb added.

The agency has formed a Drug Shortages Task Force which is led by Keagan Lenihan, FDA’s associate commissioner for strategic initiatives.

“I’m charging the shortages task force to delve more deeply into the reasons why some shortages remain a persistent challenge. The charge to this new task force is to look for holistic solutions to addressing the underlying causes for these shortages,” Dr. Gottlieb said.

Many of the drugs in short supply are low-profit margin generic medicines. “Many are sterile, parenteral drugs, which can be challenging to manufacture. The low-profit margins, and the significant cost of manufacturing these complex drugs, has resulted in consolidation in the industry. The only way to produce these low-margin products profitably is to manufacture them at tremendous scale. This has resulted in fewer and fewer manufacturers for certain key products,” Dr. Gottlieb said.

Long-term solutions may include encouraging companies to invest in increased capacity “and to produce them with robust manufacturing processes that ensure consistently available quality products. This is one area we’ll explore. But we also need to look more broadly across the entire pharmaceutical industry, health care providers, payers and government regulators for structural solutions that keep these shortages from happening.”

The Drug Shortages Task Force will include leaders from the Centers for Medicare and Medicaid Services and the Department of Veterans Affairs.

Clinical trials recruiting: Molluscum contagiosum

PHYSICIANS THROUGHOUT THE COUNTRY are recruiting patients for two phase three clinical trials of cantharidin for the viral skin condition, molluscum contagiosum.

The trials, CAMP-1 and CAMP-2, are randomized, double-blind, placebo-controlled of VP-102, a 7% cantharidin formulation administered with a single-use applicator.

In CAMP-1 and 2, VP-102 will be applied once every 21 days for up to four applications for patients two years old or older. It will be compared to a placebo group and efficacy will be assessed on day 84.

“Although cantharidin has been used extensively for decades in the treatment of dermatologic conditions molluscum and verruca vulgaris, specifications for the quality of the active pharmaceutical ingredient and a standardized formulation and dosing regimen have never been established. To date, cantharidin remains an unapproved drug in the U.S.,” said Verrica Pharmaceuticals, a trial sponsor, stated in a news release.

Lawrence Eichenfield, M.D., Rady Children’s Hospital, San Diego, is the principal investigator of both studies.

In addition to Verrica, the sponsors and collaborators of both studies include Instat Consulting, Inc., Paidion Research, Inc. and Database Integrations.

Psoriasis lotion seeks FDA approval

ORTHO DERMATOLOGICS announced in August that the Food and Drug Administration (FDA) has accepted the resubmitted New Drug Application for DUOBRII™ (halobetasol propionate and tazarotene) (IDP-118), a lotion for the treatment of plaque psoriasis.

“After meeting with the FDA and understanding the additional pharmacokinetic data required for DUOBRII, we have resubmitted the NDA ahead of schedule,” said Joseph C. Papa, chairman and CEO, Bausch Health.

“We are confident in our NDA resubmission for DUOBRII and unwavering in our commitment to bring this new treatment option to patients,” added Bill Humphries, president, Ortho Dermatologics, in the latest press release.

If approved, DUOBRII will be the only topical lotion based on a combination of halobetasol propionate and tazarotene for plaque psoriasis in adults.
COULD THE SKIN LESION YOU’RE SEEING...

ACTUALLY BE A DEADLY BLOOD CANCER?

YOU PLAY A CRITICAL ROLE IN EARLY AND ACCURATE DIAGNOSIS OF BPDCN

Blastic plasmacytoid dendritic cell neoplasm (BPDCN) is an aggressive and deadly hematologic cancer with skin lesions that may be mistaken for other skin disorders.1,2

WHO ARE PATIENTS WITH BPDCN?

- ~85-90% present with skin lesions2-4
- ~75% are men2,5
- Typically between 60-70 years of age, but all ages can be affected2,5

Plasmacytoid dendritic cells (pDCs) invade the dermis where they proliferate, resulting in skin lesions that take the form of1-3,6:
- Nodular lesions (73%)
- Bruise-like macules (12%)

Research has uncovered key markers, including cd123, that allow for the proper diagnosis of BPDCN.6*

WHEN BIOPSYING SKIN LESIONS, ASK YOUR PATHOLOGIST TO TEST FOR cd123. REFER PATIENTS EARLY.

*BPDCN diagnosis can include other markers, such as cd4, cd56, TCL1, and cd303 (BDCA2).7

Nutritional supplements should only be considered for a small subset of patients with alopecia areata, said Leslie Castelo-Soccio, M.D., Ph.D., a pediatric dermatologist with Children’s Hospital of Philadelphia. Over supplementation can lead to secondary hair loss, she warned, and most patients do not even need testing for biotin or vitamin D deficiency or celiac disease.

Researchers in the 1950s found that mice fed a diet high in egg white experienced decreased hair growth, and that hair growth resumed if they were given biotin supplementation, and advertising and marketing purports the benefits of biotin for hair growth.

However, primary deficiency, which is characterized by hypotonia, red scaly patches and plaques, poor hair growth and neurological symptoms, is rare occurring in only one in 60,000 people, Dr. Castelo-Soccio said. Secondary deficiency of biotin is more common but still rare. It can occur in pregnancy and be linked to increased raw egg consumption, alcoholism, intestinal malabsorption (i.e. short gut) or prolonged use of medications such as isotretinoin, valproic acid, other anticonvulsants or antibiotics.

A literature search found just 18 reported cases of biotin deficiency in hair conditions and only one study looking at hair loss. This study which measured biotin levels in 541 women found just over a third (38%) had marginally low levels of biotin and all of these had a history of prolonged antibiotic use, concomitant isotretinoin or antiepileptics use, or had gastrointestinal disease.

Patients with hair loss can be tested for biotin deficiency if it is suspected, Dr. Castelo-Soccio said, but she admits she rarely recommends biotin supplements, recommending foods rich in biotin such as nuts, legumes, whole grains, unpolished rice and egg yolk in the diet instead. Prevalence of celiac disease in North America and Western Europe is 0.5-1.3% and in alopecia areata around 1.2%, and one study did find that almost two thirds (64%) of patients with celiac disease and alopecia areata grew hair when they followed a gluten free diet.

A gluten-free diet may be beneficial if the patient has celiac disease, Dr. Castelo-Soccio said, but patients not exhibiting celiac disease symptoms should not be tested for the condition unless they have a first degree relative with celiac disease or have specific genetic changes like trisomy 21, Williams syndrome, selective IgA deficiency.
ALL ABOARD ONEXTON GEL

Efficacy and tolerability matter when it comes to treating acne. In the pivotal trial, ONEXTON GEL was shown to treat both inflammatory and noninflammatory acne, and no patients discontinued due to an adverse event.\(^2\)

TOLERABILITY > EFFICACY

INDICATION
ONEXTON (clindamycin phosphate and benzoyl peroxide) Gel, 1.2%/3.75% is indicated for the topical treatment of acne vulgaris in patients 12 years of age or older.

IMPORTANT SAFETY INFORMATION
- ONEXTON Gel is contraindicated in patients with a known hypersensitivity to clindamycin, benzoyl peroxide, any component of the formulation, or linomycin.
- ONEXTON Gel is contraindicated in patients with a history of regional enteritis, ulcerative colitis, or antibiotic-associated colitis.
- Diarrhea, bloody diarrhea, and colitis (including pseudomembranous colitis) have been reported with the use of topical and systemic clindamycin. ONEXTON Gel should be discontinued if significant diarrhea occurs.
- Oral and parenterally administered clindamycin has been associated with severe colitis, which may result in death.
- Anaphylaxis, as well as other allergic reactions leading to hospitalizations, has been reported in postmarketing use of products containing clindamycin/benzoyl peroxide. If a patient develops symptoms of an allergic reaction such as swelling and shortness of breath, they should be instructed to discontinue use and contact a physician immediately.
- The most common local adverse reactions experienced by patients in clinical trials were mild and moderate erythema, scaling, itching, burning, and stinging.
- ONEXTON Gel should not be used in combination with erythromycin-containing products because of its clindamycin component.
- ONEXTON Gel should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. A decision should be made whether to use ONEXTON Gel while nursing, taking into account the importance of the drug to the mother.
- Patients should be advised to avoid contact with the eyes or mucous membranes.
- Patients should minimize exposure to natural and avoid artificial sunlight (tanning beds or UVA/UVB treatment) while using ONEXTON Gel. To minimize exposure to sunlight, protective clothing should be worn and a sunscreen with SPF 15 rating or higher should be used.

To report SUSPECTED ADVERSE REACTIONS, contact Ortho Dermatologics at 1-800-321-4576 or FDA at 1-800-FDA-1088 or visit www.fda.gov/medwatch.

Please see Brief Summary of full Prescribing Information on the following page.


LEARN MORE AT ONEXTON.COM

ONEXTON®
(clindamycin phosphate and benzoyl peroxide)
Gel, 1.2%/3.75%

INSTANT SAVINGS FOR ELIGIBLE PATIENTS AT ORTHORXACCESS.COM
TERMS AND CONDITIONS APPLY
BRIEF SUMMARY OF FULL PRESCRIBING INFORMATION

This Brief Summary does not include all the information needed to use ONEXTON Gel safely and effectively. See full prescribing information for ONEXTON Gel.

ONEXTON® (clindamycin phosphate and benzoyl peroxide) Gel, 1.2%/3.75%, for topical use

Initial U.S. Approval: 2000

CONTRAINDICATIONS

Hypersensitivity

ONEXTON Gel is contraindicated in those individuals who have shown hypersensitivity to clindamycin, benzoyl peroxide, any components of the formulation, or lincomycin.

Anaaphylaxis, as well as allergic reactions leading to hospitalization, has been reported in postmarketing use with ONEXTON Gel (see Adverse Reactions).

Collitis/Enteritis

ONEXTON Gel is contraindicated in patients with a history of regional enteritis, ulcerative colitis, or antibiotic-associated colitis (see Warnings and Precautions).

WARNINGS AND PRECAUTIONS

Colitis

Systemic absorption of clindamycin has been demonstrated following topical use of clindamycin. Diarrhea, bloody diarrhea, and colitis (including pseudomembranous colitis) have been reported with the use of topical and systemic clindamycin. If diarrhea occurs, ONEXTON Gel should be discontinued.

Severe colitis has occurred following oral and parental administration of clindamycin in an onset of up to several weeks following cessation of therapy. Antiperistaltic agents such as opiates and diphenoxylate with atropine may prolong and/or worsen severe colitis. Severe colitis may result in death.

Studies indicate toxin(s) produced by Clostridia is one primary cause of antibiotic-associated colitis. The colitis is usually characterized by severe persistent diarrhea and severe abdominal cramps and may be associated with the passage of blood and mucus. Stool cultures for Clostridium difficile and stool assay for C. difficile toxin may be helpful diagnostically.

Ultraviolet Light and Environmental Exposure

Minimize sun exposure (including use of tanning beds or sun lamps) following drug application (see Nonclinical Toxicology).

ADVERSE REACTIONS

The following adverse reaction is described in more detail in the Warnings and Precautions section of the label: Collitis (see Warnings and Precautions).

Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in clinical trials of a drug cannot be directly compared to rates observed in the clinical trials of another drug and may not reflect the rates observed in clinical practice.

These adverse reactions occurred in less than 0.5% of subjects treated with ONEXTON Gel: Burning sensation (0.4%); contact dermatitis (0.4%); pruritus (0.4%); and rash (0.4%).

During the clinical trial, subjects were assessed for local cutaneous signs and symptoms of erythema, scaling, itching, burning, and stinging. Most local skin reactions either were the same as baseline or increased and peaked around week 4 and were near or improved from baseline levels by week 12. The percentage of subjects that had symptoms present before treatment (at baseline), during treatment, and the percent with symptoms present at week 12 are shown in Table 1.

Table 1: Local Skin Reactions - Percent of Subjects with Symptoms Present. Results from the Phase 3 Trial of ONEXTON Gel 1.2%/3.75% (N = 243)

<table>
<thead>
<tr>
<th>Reaction</th>
<th>Before Treatment (Baseline)</th>
<th>Maximum During Treatment</th>
<th>End of Treatment (Week 12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erythema</td>
<td>Mild</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Mod.*</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Severe</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>Scaling</td>
<td>Mild</td>
<td>5</td>
<td>&lt;1</td>
</tr>
<tr>
<td></td>
<td>Mod.*</td>
<td>5</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

*Mod. = Moderate

Postmarketing Experience

Because postmarketing adverse reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

Anaaphylaxis, as well as allergic reactions leading to hospitalizations, has been reported in postmarketing use of products containing clindamycin phosphate/benzoyl peroxide.

DRUG INTERACTIONS

ERYTHROMYCIN

Avoid using ONEXTON Gel in combination with topical or oral erythromycin-containing products due to clindamycin component. In vitro studies have shown antagonism between erythromycin and clindamycin. The clinical significance of this in vitro antagonism is not known.

Concomitant Topical Medications

Concomitant topical acne therapy should be used with caution since a possible cumulative irritant effect may occur, especially with the use of peeling, desquamating, or abrasive agents. If irritancy or dermatitis occurs, reduce frequency of application or temporarily interrupt treatment and resume once the irritation subsides. Treatment should be discontinued if the irritation persists.

Neuromuscular Blocking Agents

Clindamycin has been shown to have neuromuscular blocking properties that may enhance the action of other neuromuscular blocking agents. ONEXTON Gel should be used with caution in patients receiving such agents.

USE IN SPECIFIC POPULATIONS

Pregnancy

There are no adequate and well-controlled studies in pregnant women treated with ONEXTON Gel. ONEXTON Gel should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Animal reproductive/developmental toxicity studies have not been conducted with ONEXTON Gel or benzoyl peroxide. Developmental toxicity studies of clindamycin performed in rats and mice using oral doses of up to 600 mg/kg/day (240 and 120 times amount of clindamycin in the highest recommended adult human dose based on mg/m2, respectively) or subcutaneous doses of up to 200 mg/kg/day (80 and 40 times the amount of clindamycin in the highest recommended adult human dose based on mg/m2, respectively) revealed no evidence of teratogenicity.

Nursing Mothers

It is not known whether clindamycin is excreted in human milk after topical application of ONEXTON Gel. However, orally and parenterally administered clindamycin has been reported to appear in breast milk. Because of the potential for serious adverse reactions in nursing infants, a decision should be made whether to use ONEXTON Gel while nursing, taking into account the importance of the drug to the mother.

Pediatric Use

Safety and effectiveness of ONEXTON Gel in pediatric patients under the age of 12 have not been evaluated.

Geriatric Use

Clinical trials of ONEXTON Gel did not include sufficient numbers of subjects aged 65 and older to determine whether they respond differently from younger subjects.

NONCLINICAL TOXICOLOGY

Carcinogenesis, Mutagenesis, Impairment of Fertility

Carcinogenicity, mutagenicity and impairment of fertility testing of ONEXTON Gel have not been performed.

Benzoyl peroxide has been shown to be a tumor promoter and progression agent in a number of animal studies. Benzoyl peroxide in acetone at doses of 5 and 10 mg administered topically twice per week for 20 weeks induced skin tumors in transgenic Tg.AC mice. The clinical significance of this is unknown.

Carcinogenicity studies have been conducted with a gel formulation containing 1% clindamycin and 5% benzoyl peroxide. In a 2-year dermal carcinogenicity study in mice, treatment with the gel formulation at doses of 900, 2700, and 15000 mg/kg/day did not cause any increase in tumors. In a 2-year dermal carcinogenicity study in rats, treatment with the gel formulation at doses of 900, 9000, and 30000 mg/kg/day, 12 times amount of clindamycin and 2, 4, 7, 2, and 40 times amount of benzoyl peroxide in the highest recommended adult human dose of 2.5 g ONEXTON Gel based on mg/m2, respectively did not cause any increase in tumors. However, topical treatment with a different gel formulation containing 1% clindamycin and 5% benzoyl peroxide at doses of 100, 500, and 2000 mg/kg/day caused a dose-dependent increase in the incidence of keratoacanthoma at the treated skin site of male rats in a 2-year dermal carcinogenicity study in rats. In an oral (gavage) carcinogenicity study in rats, treatment with the gel formulation at doses of 900, 9000 and 30000 mg/kg/day, 12 times amount of clindamycin and 1, 6, 4, 3, and 16 times amount of benzoyl peroxide in the highest recommended adult human dose of 2.5 g ONEXTON Gel based on mg/m2, respectively for up to 97 weeks did not cause any increase in tumors. In a 52-week dermal photocarcinogenicity study in hairless mice, (40 weeks of treatment followed by 12 weeks of observation), the median time to onset of skin tumor formation decreased and the number of tumors per mouse increased relative to controls following chronic concurrent topical administration of the higher concentration benzoyl peroxide formulation (5000 and 10000 mg/kg/day, 5 days/week) and exposure to ultraviolet radiation.

Clindamycin phosphate was not genotoxic in the human lymphocyte chromosome aberration assay. Benzoyl peroxide has been found to cause DNA strand breaks in a variety of mammalian cell types, to be mutagenic in S. typhimurium tests by some but not all investigators, and to cause sister chromatid exchanges in Chinese hamster ovary cells.

Fertility studies have not been performed with ONEXTON Gel or benzoyl peroxide, but fertility and mating ability have been studied with clindamycin. Fertility studies in rats treated orally with up to 300 mg/kg/day of clindamycin (approximately 120 times the amount of clindamycin in the highest recommended adult human dose of 2.5 g ONEXTON Gel, based on mg/m2) revealed no effects on fertility or mating ability.

PATIENT COUNSELING INFORMATION

See FDA-approved patient labeling (Patient Information).

Manufactured for:

Valeant Pharmaceuticals North America LLC
Bridgewater, NJ 08807 USA

By:

Valeant Pharmaceuticals International, Inc.
Laval, Quebec H7L 4A8, Canada

U.S. Patent 8,288,434

Onext is a trademark of Valeant Pharmaceuticals International, Inc. or its affiliates.

©Valeant Pharmaceuticals North America LLC
Rev 04/2018

9432703

ONX.0081.USA.18
"Over supplementation can lead to secondary hair loss and most patients do not even need testing for biotin, vitamin D deficiency or celiac disease."

Leslie Castelo-Soccio, M.D., Ph.D., Children’s Hospital of Philadelphia

Foods rich in Biotin that may enhance hair growth

- Nuts
- Legumes
- Whole grains
- Unpolished rice
- Egg yolks

References

tificsessions/sam/2018/SessionDetails.aspx?id=1208


Topical rapamycin improves TSC facial lesions

WAYNE KUZNAR | Staff Correspondent

**Quick Takes**

No systemic side effects were reported amongst 179 patients.

First improvement occurred in color: less redness.

Local reactions were the most common adverse events.

Topical rapamycin significantly improved facial angiobromas secondary to tuberous sclerosis complex, according to data from a six-month randomized placebo-controlled study. The 1% formulation of rapamycin performed better than 0.1% in a visual analysis, but was not statistically significantly better, reported Mary Kay Koenig, M.D., and colleagues in *JAMA Dermatology*.

Current treatments for facial angiobromas include laser surgery, cryotherapy, dermabrasion and similar approaches, which — in addition to being painful and causing scarring — don’t prevent recurrence of lesions.

Topical rapamycin is “a great treatment for these patients...we had no absorption [of rapamycin] throughout the duration of the study, so we were able to show that topical rapamycin is able to effectively treat the facial angiobromas in tuberous sclerosis without any systemic side effects,” said Dr. Koenig, from the University of Texas Health Science Center, Houston, in a *JAMA* podcast.

Facial angiobromas in patients with tuberous sclerosis complex tend to start in childhood and become more aggressive and more confluent as people get older, “and in some patients it can be extremely disfiguring,” she said.

Her group’s study enrolled 179 patients across 10 sites. Patients with tuberous sclerosis complex who had visible angiobromas were randomized into one of three arms: a vehicle-only arm, topical rapamycin 0.1%, or topical rapamycin 1%. The treatment or vehicle was applied nightly for six months and patients were assessed monthly at study sites. At each visit, a digital photograph was taken to allow for comparison of pre- and post-treatment photos.

Photographs were assessed at the end of the six months by dermatologists blinded to the study arm assignment, who were asked to score the severity of lesions using the Angiobroma Grading Scale (AGS) developed by the investigators. The AGS scores each lesion on the forehead, nose, cheeks, and skin for erythema, size, density, and percent involvement on a zero to four. The total score ranges from zero to 202. The mean improvement on the AGS was the primary outcome. A secondary outcome was the photo readers’ rating (better, same or worse) of paired baseline and end-of-trial photographs for each patient.

The mean age of the study cohort was 20.5 years with a predominance of white patients (67.6%). A total of 159 of the 179 patients had photos evaluable at both baseline and at least 1 postbaseline visit. The group randomized to 1% rapamycin had a mean improvement of 16.7 points from baseline to visit seven on the AGS, which was statistically superior to vehicle only (P<0.001). Patients randomized to 0.1% rapamycin had a mean 11.0-point improvement on the AGS at visit seven, which was statistically superior to vehicle only (P=0.01), and at every individual visit except visit two (P=0.07).

Use of 1% rapamycin was visually superior to 0.1% rapamycin but not statistically significantly superior.

A total of 164 paired baseline and end-of-trial photographs were available for side-by-side rating. The end-of-trial photo was rated better than the baseline photo in the 1% rapamycin group for 81.8% of patients compared with 65.5% in the 0.1% rapamycin group and 25.5% in the vehicle-only group.

According to Dr. Koenig, the first improvement in lesions with the use of rapamycin was in color (less redness). “Over time, the lesions began shrinking and regions of the face became clearer,” she said.

Topical rapamycin was well tolerated. Most adverse events believed to be treatment related were local reactions that included itching, discomfort, and irritation at the site of application, as well a slight increase in acne. Assessment of blood samples found no absorption of rapamycin for the duration of the study.

“One of the things that we would like to see is whether the oral therapy in combination with the topical could produce further improved outcomes. We also think that further studies are needed to be done to better define the optimal dose or the optimal concentration. As we only used 2 concentrations we don’t know if perhaps 2% would be even better or maybe 0.5% would be enough,” Dr. Koenig said.

**Reference**

Ovarian reserve low in female patients with PsO

Endocrinologist, obstetrician referral should precede systemic therapy

WHITNEY J. PALMER | Staff Correspondent

Women with psoriasis could have a harder time getting pregnant, according to new research.

Based on a study published in the Taiwanese Journal of Obstetrics & Gynecology, these patients have a diminished ovarian reserve or a number of follicles capable of producing a mature, healthy egg for fertilization.

Current data suggest female hormones released during pregnancy impact the course of psoriasis, and at the same time, psoriasis affects pregnancy outcomes. However, no previous research exists into the ovarian reserve and function of psoriatic patients.

Knowing how psoriasis might affect pregnancy outcomes can be very important for women considering having children, the authors wrote.

“The average age of diagnosis in women with psoriasis is 28, which is a prime age for pregnancy. Therefore, many female patients with psoriasis are concerned about adverse effects of the disease on their future fertility,” they wrote.

Although age is a factor in determining whether a woman can get pregnant, it has limited usefulness in predicting individual ovarian performance. Consequently, knowing a woman’s ovarian reserve is increasingly important clinically.

And, the measure of a number of factors can help determine the quality of a woman’s ovarian reserve. These include basal follicle stimulating hormone (FSH), estrogen (E2), FSH/luteinizing hormone (LH) ratio, Inhibin B, and antimullerian hormone (AMH). Ovarian volume (OV) and antral follicle count (AFC) determine ovary size and shape.

THE STUDY

The study, conducted between January and September 2014, occurred in Aksaray University Research and Training hospital in Turkey. It was designed to determine whether women with psoriasis who hadn’t undergone previous treatment had a reduced ovarian reserve compared to women without psoriasis. They also investigated if disease severity was associated with ovarian reserve.

Researchers selected participants based on their type of psoriasis, presence of hair and nail psoriasis, and the severity of disease. Participants were excluded for infertility, pregnancy, gynecological pathologies, polycystic ovarian syndrome, breastfeeding, gynecological surgery history, chronic liver or kidney failure, smoking, cancer, or other dermatological, inflammatory, physical, or psychiatric disorders. Women who previously received any systemic treatment and hormone medication were also excluded due to potential effects on ovarian function.

Researchers enrolled 14 women with psoriasis for this study. Nine had plaque type psoriasis, three had guttate type, and two had palmoplantar type. A control group of

THE RIGHT THERAPY Writing in an article published online ahead of print in JAAD, physicians explore therapies for pregnant and pediatric patient populations. http://bit.ly/PsOTherapies
Tralokinumab phase 2b update for atopic dermatitis

Study indicates treatment effective for disease in adult patients

BOB KRONEMYER | Staff Correspondent

The fully human immunoglobulin G4 monoclonal antibody drug tralokinumab (LEO Pharma A/S) was shown to be efficacious and safe for treating moderate-to-severe atopic dermatitis in adults, shows a phase 2b study.

The study, which was conducted at 55 sites in Australia, Canada, Germany, Japan Poland and the United States, equally randomized 204 patients to one of four treatment protocols: 45 mg, 150 mg or 300 mg of subcutaneous tralokinumab, or placebo, every two weeks for 12 weeks, along with concomitant topical glucocorticoids.

At week 12, the strongest dose of tralokinumab achieved a significant improvement of -4.94 in the Eczema Area Severity Index (EASI) score compared to placebo. And for the 150 mg dose, the difference was -4.36.

However, after pooling the data for the 300 mg and 150 mg tralokinumab doses, there was not a significant difference in the percentage of participants with an Investigator’s Global Assessment (IGA) response at week 12 in contrast to placebo: 23.0% versus 11.8%, respectively.

Still, numeric improvements in IGA response rates were observed with increasing doses of tralokinumab, with the greatest absolute percentage difference from placebo in patients treated with 300 mg of tralokinumab: 26.7% versus 11.8%.

The 300 mg drug group also had improvements in SCORAD (“SCORing Atopic Dermatitis”), the Dermatology Life Quality Index and the pruritus numeric rating scale.

The study authors note that dupilumab (Regeneron/Sanofi), also a human monoclonal antibody drug, has shown improvements in the symptoms of atopic dermatitis. But dupilumab inhibits both IL-4 and IL-13 signaling, whereas tralokinumab specifically binds to and neutralizes the effects of IL-13.

“Our study is important because it shows that blocking cytokine IL-13 will improve atopic dermatitis,” says principal investigator Andreas Wollenberg, M.D., of Ludwig Maximilian University in Munich, Germany.

“There are other drugs that inhibit the signaling pathways of IL-13 and IL-4 at the same time, and these are also known to work well, but we were able to demonstrate that blocking only IL-13 is sufficient.”

Dr. Wollenberg was motivated to undertake the study to learn if blocking of IL-13 alone would be adequate to improve atopic dermatitis.

“I also wanted to learn about the associated side effects of this approach,” he told Dermatology Times.

A biomarker subgroup analysis of tralokinumab found that the median baseline serum for dipeptidyl peptidase 4 (DDP-4), periostin, thymus-and-activation-regulated chemokine/(CCL17/TARC) and immunoglobulin E (IgE) concentrations were 265.8 ng/ML, 29.8 ng/ML, 1478.2 ng/ML and 3045.6 kU/L, respectively.

“The efficacy data for the biomarker DDP-4 was interesting, but not completely unexpected for me,” says Dr. Wollenberg. “The DDP-4 would be produced as a consequence of IL-13, and therefore it is somewhat expected that patients with a high DPP-4 level will respond better to tralokinumab.”

The study, which appears in the Journal of Allergy and Clinical Immunology, observed that adverse events were minimal. “There were more cases of nasopharyngitis, but
There are other drugs that inhibit IL-13 and IL-14, and these are known to work well, but we were able to demonstrate that blocking only IL-13 is sufficient."

Andreas Wollenberg, M.D. LudwigMaximillian University, Munich

otherwise nothing of importance," Dr. Wollenberg says. The rate of upper respiratory tract infection was the same for both placebo and the tralokinumab groups: 3.9%.

As to limitations of the study, the study was performed with a pre-treatment and ongoing treatment of topical steroids during the active phase.

"Because the results were obtained on a therapeutic background, the efficacy cannot be compared easily with other trial data," Dr. Wollenberg says.

Also, this was a phase two study involving 204 adults only.

"Less common adverse events may not have shown up," Dr. Wollenberg says.

The authors note that previous atopic dermatitis studies have mostly emphasized reversing clinical symptoms as opposed to documenting biomarker changes.

"Biomarkers are playing an increasingly important role in predicting treatment response, and our results are likely to assist in progressing atopic dermatitis treatment toward a more personalized approach," they wrote.

In addition, combining tralokinumab with topical glucocorticoids may benefit patients whose symptoms cannot be effectively controlled by topical glucocorticoids alone. But because these medications are associated with a range of systemic and topical side effects, their long-term use on a large body surface area is unrealistic. Thus, there is a great need for drugs like tralokinumab to reduce the reliance on high-dose topical glucocorticoids.

"We are looking forward to the results of the next tralokinumab trial, which is still ongoing," Dr. Wollenberg says.

Disclosures: The study was funded by LEO Pharma A/S. Dr. Wollenberg is a consultant to numerous pharmaceutical companies active in chronic-inflammatory skin diseases, and especially in atopic dermatitis. He is also conducting trials in this area. Among his consulting clients are LEO Pharma, Galderma, Sanoﬁ, Regeneron, Lilly, Pfizer and Novartis.

Reference
Wollenberg A, Howell MD, Guffon-Yealki E, et al. "Treatment of Atopic Dermatitis with Tralokinumab, an Anti-IL-13 mAb," Journal of Allergy and Clinical Immunology. DOI:10.1016/j.jaci.2018.05.029

An exclusive program from TaroPharma dedicated to improving patient access*

TAROPHARMA DIRECT™ PRESCRIPTION ACCESS PROGRAM

Commercially insured patients pay no more than $50*

*Prescriptions that may be reimbursed under federal or state healthcare program (including Medicaid and Medicare) are not eligible under this program. Additional restrictions may apply.
Hidradenitis suppurativa, Crohn’s disease linked

ILYA PETROU, M.D. | Staff Correspondent

Researchers writing in JAMA Dermatology report that patients diagnosed with hidradenitis suppurativa (HS) are at a higher risk for having or developing Crohn’s disease (CD). As such, HS patients with gastrointestinal symptoms suggestive of CD should be evaluated further, with the dermatologist maintaining an important role in optimizing multidisciplinary management in these patients.

“The link between HS and Crohn’s disease is one of those associations that we do not want to miss because both diseases are serious and have significant impact on patients’ health. Having an awareness of this association and taking a thorough review of symptoms will help us to recognize this comorbidity in a timely manner,” said the study’s author, Amit Garg M.D., of Northwell Health in New York.

Dr. Garg and colleagues conducted a study to evaluate the prevalence of CD among patients with HS in the United States and to determine the strength of association between the two diseases. Data was reviewed from 51,340 patients (35,000 women) with HS who were identified using electronic health records data that included information from more than 50 million unique patients across all U.S. census regions.

Of the 51,340 HS patients, 29,010 (56.5%) were aged 18 to 44 years, followed by 17,580 (34.2%) aged 45 to 64 years, and 4,750 (9.3%) aged 65 years or older. The prevalence of CD among patients with HS was 2.0% compared to 0.6% among those without HS. The prevalence of CD was greatest among patients with HS who were white (2.3%), aged 45 to 64 years (2.4%), non-obese (2.8%), and tobacco smokers (2.3%). Patients with HS were also shown to have over three times the risk of having CD compared to patients without HS. It was found that CD was associated with HS across all patient subgroups, which was seen to be stronger in men, patients aged 45 to 64 years, non-obese patients, and nonsmokers.

Hidradenitis suppurativa is a chronic debilitating inflammatory disease affecting the apocrine glands in the intertriginous skin, typically presenting as painful, deep-seated, inflamed nodules with potential to suppurate and form fistulas. The disease may also be associated with several comorbidities that can further significantly impact the patient’s health, including spondyloarthropathy, dyslipidemia, allergic hypersensitivity reactions, inflammatory bowel disease, polycystic ovary syndrome, psychiatric disorders, obesity, drug dependence, hypertension, diabetes, lymphoma, and thyroid disease.

There are several features that are shared between HS and CD in particular. Both are inflammatory diseases involving epithelia characterized by suppuration, granulomatous inflammation, and the formation of fistulas and sinuses. The two conditions have similar ages of onset and both have been linked to tobacco smoking and arthritis. In addition, both diseases appear to share inflammatory pathways, as well as susceptibility genes. As such, it is not unexpected that patients with one disease may develop the other. Although rare, CD may also manifest itself on the skin and resemble HS, making it sometimes challenging to distinguish between a cutaneous manifestation of CD and the disease HS.

According to Dr. Garg, any patient with HS who has a positive review of systems for CD should be screened for inflammatory bowel disease. This work-up may be initiated by the patient’s primary care physician, or by referral to a gastroenterologist. If the patient is ultimately diagnosed with Crohn’s disease, then the dermatologist will likely be involved in the multidisciplinary approach to management of the patient, as existing and future therapies are likely to have overlapping efficacy in both conditions.

“There is certainly a lot more that we need to understand regarding the relationship between HS and Crohn’s disease, their coexistence and their potential influences on one another. In addition to having keen awareness of Crohn’s disease as a comorbidity, we as dermatologists can also engage our HS patients in a smoking cessation plan that could ultimately impact the development, course and severity of diseases,” Dr. Garg said.

Disclosures: Dr. Garg serves as consultants to AbbVie, Pfizer, Janssen, Asana Biosciences.

References
Remove boldly. Treat lightly.

Now cleared for acne scars and wrinkles

PicoWay® is a powerful picosecond laser established for tattoo removal and treatment of benign pigmented lesions. Now with PicoWay Resolve for acne scars and wrinkles, the PicoWay platform is an even smarter investment to help you achieve desired clinical results and practice growth.

PicoWay delivers 3 true picosecond wavelengths (532 nm, 785 nm, and 1064 nm) with high peak power and the shortest pulse durations for:

- Photoacoustic treatment
- High satisfaction
- Usage across a wide range of skin types
- Low to no downtime

*Based on available 510(k) summaries as of October 2017.


© 2018 Candela Corporation. This material contains registered trademarks, trade names and brand names of Candela Corporation and its affiliates, including Syneron, Candela, and PicoWay. All other trademarks are the property of their respective owners. All rights reserved. PB95671EN-NA
10 Reasons why patients are not compliant

WHITNEY J. PALMER | Staff Correspondent

One hurdle in treating patients, particularly children and teens, is ensuring compliance with treatment protocols. It can feel like an uphill battle, but there are things you can do to improve your patients’ adherence level.

According to Steven R. Feldman, M.D., Ph.D., professor of dermatology, pathology, and public health sciences at Wake Forest University School of Medicine, there are many reasons why patients resist following instructions. But, a comprehensive approach can help you change their behavior. He offered tips on working with patients with atopic dermatitis at the American Academy of Dermatology 2018 Summer Meeting.

CREATE AN ADHERENCE PROTOCOL
It’s possible to improve how well your patients follow your instructions, though. Feldman recommends establishing a system to encourage adherence from the first visit.

1. SCHEDULE FOLLOW-UPS
Patients are more likely to fill prescriptions and use medications if they know they’ll see you again soon. In fact, Feldman cited a study showing a 1-week return visit was more effective in prompting kids to apply 0.1% tacrolimus ointment than parent or electronic reminders.

2. SIMPLIFY TREATMENT
Make the protocol as easy to follow as possible. If it requires too many steps, patients are less likely to do it.

3. WRITTEN PLAN
Don’t rely on patients’ memories. Give them written instructions that include an explanation of their condition, treatment tips, guidance for managing flare-ups, and details on when to call you.

4. CREATE TRIGGERS
Calendar and digital reminders can be effective tools in facilitating patient compliance. Additionally, “barrier” triggers, such as putting anti-fungal creams on top of a sock drawer, or special packages, such as weekly pill boxes, can also be helpful.

5. CREATE MOTIVATION
Provide positive feedback, such as sticker charts for young children.

6. EMPLOY TEEN PSYCHOLOGY
Don’t acknowledge teen non-compliance. Instead, talk about medications teens use frequently or about reminder systems that work well for the age group.

7. OFFER ANECDOTES
Share success stories to help them feel comfortable with a treatment.

Concentrating on patient adherence might not be your primary focus, Feldman says, but with the right compliance protocol you could be as effective in helping patients stick with treatment as you are providing a diagnosis.

Reference
Steven R. Feldman, M.D., Ph.D. “Optimizing Topical Therapy in Atopic Dermatitis,” American Academy of Dermatology 2018 Summer Meeting, Chicago, Ill., July 29, 10a.m.-1p.m.

Overall, if patients aren’t implementing your guidance, he says, it’s likely for one of these reasons:

- Lack motivation or the condition isn’t bothersome
- Seeking some other gain
- Distrustful of you
- Scared of the medicine or treatment
- Forgot your instructions
- Treatment is more burdensome than disease
- Treatment is believed to be worse than disease
- Forgot to use the medicine
- Lazy or couldn’t be bothered
- Give up after trying the treatment

Quick TAKES
To improve compliance, establish a protocol.
Provide written instructions, triggered reminders, and positive motivation.
THE BIGGEST ADVANCE IN AQUAPHOR® SINCE AQUAPHOR

NEW AQUAPHOR OINTMENT BODY SPRAY
FIRST & ONLY SPRAYABLE OINTMENT

Effective, long-lasting relief of dry, rough skin in patients with xerosis

% SUBJECTS IMPROVED | 96% dryness | 91% scaling | 80% cracks

Statistically significant improvement from baseline

Beiersdorf
Genetics of itch will help develop targeted therapies

BOB KRONEMYER | Staff Correspondent

Mapping the human genome for chronic itch holds the potential to develop better targeted therapy for atopic dermatitis and psoriasis itch, according to the first study to describe the chronic itch transcriptome.

“These are the genetic factors involved in itch for atopic eczema and psoriasis,” says principal investigator Gil Yosipovitch, M.D., of the University of Miami Miller School of Medicine in Florida. “These genetic factors are unique to itch. The itch transcriptome also follows with some immunohistochemistry (IHC) to show what are the most important factors involved in and correlated to itch severity.”

Dr. Yosipovitch was inspired to undertake the study based on animal models. “There was no study on the genes involved in itch in humans, specifically chronic itch in the skin,” he says. “The transitional aspect of our study is significantly important because this is real life genes versus genes found in animal studies.”

The study, which appears in the Journal of Investigative Dermatology, used RNA sequencing to analyze the complete transcriptome in skin. Paired itchy/lesional and non-itchy/non-lesional skin biopsies from 25 patients with atopic dermatitis and 25 patients with psoriasis had their biopsies matched with 30 healthy controls.

The analysis identified 18,000 differentially expressed genes that were common in itchy atopic and itchy psoriatic skin, of which nearly 2,000 of these genes were differentially expressed in itchy and non-itchy skin.

The study identifies the most important targets related to itch for treatment of both atopic dermatitis and psoriasis. The common targets are also detected because there are several areas where there is overexpression of genes that are reflective of both diseases.

“In addition, the study provides important information that allows drug companies to validate that the drugs they are developing make sense in treating chronic itch of different types,” Dr. Yosipovitch tells Dermatology Times.

For example, cytokine IL-31 is the cytokine that has been coined the itch cytokine. “Nemolizumab by Galderma is an IL-31 receptor antibody in clinical trials for atopic eczema that blocks that receptor,” Dr. Yosipovitch says. “But our study shows that IL-31 also plays a key role in itch in psoriasis. This is a surprising finding.”

Likewise, IL-17A is the target of ixekizumab and secukinumab in clinical practice to treat psoriasis. “But that cytokine has also been shown to be associated with itch in both diseases,” Dr. Yosipovitch says.

Neurokinin 1, the receptor for substance P, was also highly expressed in both diseases and correlated to itch severity. Similarly, the protease tryptase, which was previously thought to be associated with atopic dermatitis, appears to be involved with psoriasis, too.

The study also found that phospholipase A2, which is a precursor for prostaglandins and highly abundant in the skin, was strongly linked to itch for both conditions.

Based on the study’s findings, Dr. Yosipovitch says it is too early for clinicians to change their practice habits, as the majority of the drugs targeting these itch mediators are not yet in the market. “However, the study provides proof on the genetic level that antihistamines targeting the histamine receptor 1 ... have no utility in treating itch [in AD and psoriasis].”

The study also found that phospholipase A2, which is a precursor for prostaglandins and highly abundant in the skin, was strongly linked to itch for both conditions.
A new phase two study shows that guselkumab significantly improves signs and symptoms of psoriatic arthritis (PsA), supporting the importance of interleukin (IL)-23 as a therapeutic target in PsA.

The superiority of guselkumab emerged as early as week four, when 21% of treated patients reached ACR 20, versus no placebo-treated patients. At week 24, 58% of guselkumab-treated patients achieved ACR 20, as did 18% of placebo-treated patients (p<0.0001). ACR 20, 50 and 70 responses of guselkumab-treated patients held steady or improved slightly between weeks 24 (58%, 34%, 14%) and 56 (61%, 43% and 27%). Guselkumab also achieved significantly better Psoriasis Area and Severity Index (PASI) 50, 75, 90 and 100 results at all time points.

The proportions of guselkumab-treated and placebo-treated patients achieving at least 0.35 improvement from baseline in Health Assessment Questionnaire Disability Index (HAQ-DI) scores at week 24 were 51% and 29%, respectively. Mental component summary scores on the 36-Item Short-Form Health Survey (SF-36) at week 24 improved by 9.06% and 6.74%, respectively. Week 24 enthesitis and dactylitis scores both fell 100 percent in the guselkumab cohort, versus 33.3% for placebo.

Deodhar et al. write that the efficacy of guselkumab in psoriasis and PsA may stem from its neutralization of IL-23 or IL-39; both cytokines share the p19 subunit. However, they hypothesize, the previously reported efficacy of drugs blocking IL-12/23 and IL-17 in these diseases suggests that IL-23 is more likely than IL-39 to drive guselkumab’s efficacy.

“The other exciting part is the significant improvement in patients’ functioning, which is not surprising because patients’ pain, swelling and skin improved.”

Quick Takes

IL-23p19 guselkumab significantly improved signs and symptoms of active psoriatic arthritis.

Most frequent adverse events were infections in 16% of patients.

It was well tolerated during 44 weeks of treatment.
Guselkumab for scalp, hand and foot psoriasis

IL-23 inhibitor outduels adalimumab

JOHN JESITUS | Staff Correspondent

For psoriasis in difficult locations including the scalp, palms and soles, guselkumab significantly outperforms adalimumab and placebo, shows a study published in *JAMA Dermatology*.

Historically, said principal investigator Andrew Blauvelt, M.D., M.B.A., of Oregon Medical Research Center, psoriasis of the scalp, nails, palms and soles has proven difficult to clear. “This study shows that guselkumab effectively improves psoriasis in all those areas – and much more effectively than adalimumab does on the scalp, palms, and soles.” The two drugs posted comparable results for nail psoriasis. The study was published online May 16.

Foley et al.’s findings come from a secondary analysis of results from the pivotal VOYAGE 1 and 2 trials, which were published (separately) in the *Journal of the American Academy of Dermatology* in March 2017. In these studies, researchers randomized 1,829 patients to receive one of three regimens through week 24:

- Guselkumab 100 mg at weeks zero, four, 12, and 20
- Placebo at weeks zero, four, and 12, followed by guselkumab 100 mg at weeks 16 and 20
- Adalimumab 80 mg at week zero, 40 mg at week one, and 40 mg every two weeks through week 23.

To evaluate drug performance in difficult areas, Dr. Blauvelt and colleagues included in their pooled analysis patients with baseline scores of two or higher on scales specific for the scalp (scalp-specific Investigator Global Analysis/ss-IGA; 1,512 patients/82.7%), the Physician’s Global Assessment of the hands and/or feet (hf-PGA; 461/25.2%) and the fingernail PGA (f-PGA; 928/50.7%).

For the scalp, palms and soles, guselkumab achieved statistically significantly greater improvements than adalimumab for near-complete and complete clearance, as well as for complete clearance in these regions, at week 24. For scalp psoriasis, the proportions of patients achieving scores of one or zero (with at least a two-point reduction) in the guselkumab and adalimumab cohorts were 85.0% and 68.5%, respectively (p<0.001). Likewise, 69.9% of guselkumab-treated patients achieved complete scalp clearance, versus 56.3% of adalimumab-treated patients (p<0.001), at week 16.

For the palms and/or soles, the proportions of patients in the guselkumab and adalimumab cohorts who achieved week 24 scores of zero or one (with at least a two-point reduction) were 80.4% and 60.3% (p<0.001). Also at this time point, 75.0% and 50.3% of patients in these cohorts, respectively, achieved complete clearance (p<0.001).

Regarding fingernail psoriasis at week 24, 60.0% and 64.3% of guselkumab-treated patients and adalimumab-treated patients, respectively, achieved scores of zero or one (p=0.11). Reasons for this lack of separation between the two treatments are unclear at this time, said Dr. Blauvelt. “It may be that guselkumab takes more time to see a full effect in the nails.”

As for strengths of the study’s design, he said, “Head-to-head comparative studies are uncommon in dermatology. This represents a large, double-blinded, well-controlled head-to-head trial.” Other trials of biologic drugs for psoriasis have rarely looked at hard-to-treat areas as closely as this analysis did, he added.

Study drawbacks include the fact that investigators only reported data out to six months, said Dr. Blauvelt. “We need more long-term data. The VOYAGE 1 and 2 studies have been extended for several years, so these analyses will be forthcoming.”

For now, he said, “Patients can be told that with guselkumab, their traditionally tough-to-clear areas will respond just as well as other areas of the body.” It’s unclear why psoriasis in these areas has proven so resistant, he said.
GETTING OTEZLA GETS EVEN EASIER

8 out of 10 commercially insured lives in the US have preferred access with no biologic step required for Otezla® (apremilast)¹

Your patients on commercial insurance can now access Otezla without any biologic step-edit requirements on:

- Aetna Prescription Drug Benefit
- Cigna Prescription Drug List
- CVS Caremark Basic and Standard Control Formularies
- Express Scripts National Preferred Formulary*
- OptumRx ✓
- Prime Therapeutics
- UnitedHealthcare ✓

*SafeGuardRx™ Program has 1 biologic step for patients on certain Otezla indications.

No DMARD or biologic step-edit required

Contact your Otezla representative or visit otezlapro.com for a complete list of plans

DMARD, disease-modifying antirheumatic drug.

Reference: ¹ Data on file, Celgene Corporation.
Otezla® (apremilast) significantly increased PASI-75 response (n = 562) at week 16 (primary endpoint) vs placebo (n = 282) (33% vs 5%; P < 0.0001) in ESTEEM 1.²

**ESTEEM® Study Design**
- Evaluated in 2 multicenter, double-blind, placebo-controlled trials of similar design. Patients with moderate to severe plaque psoriasis (N = 1257) were randomized 2:1 to Otezla 30 mg twice daily or placebo for 16 weeks after a 5-day titration²
- Selected inclusion criteria: age ≥18 years, BSA ≥10%, sPGA ≥3, PASI ≥12, candidates for phototherapy or systemic therapy²

**INDICATIONS**
Otezla® (apremilast) is indicated for the treatment of patients with moderate to severe plaque psoriasis who are candidates for phototherapy or systemic therapy.

Otezla® is indicated for the treatment of adult patients with active psoriatic arthritis.

**IMPORTANT SAFETY INFORMATION**

**Contraindications**
- Otezla® (apremilast) is contraindicated in patients with a known hypersensitivity to apremilast or to any of the excipients in the formulation

**Warnings and Precautions**
- Diarrhea, Nausea and Vomiting: Cases of severe diarrhea, nausea, and vomiting have been reported with the use of Otezla. Most events occurred within the first few weeks of treatment. In some cases patients were hospitalized. Patients 65 years of age or older and patients taking medications that can lead to volume depletion or hypotension may be at a higher risk of complications from severe diarrhea, nausea, or vomiting. Monitor patients who are more susceptible to complications of diarrhea or vomiting; advise patients to contact their healthcare provider. Consider Otezla dose reduction or suspension if patients develop severe diarrhea, nausea, or vomiting

- Depression: Treatment with Otezla is associated with an increase in depression. During clinical trials 1.3% (12/920) of patients reported depression, compared to 0.4% (2/506) on placebo. Suicidal behavior was observed in 0.1% (1/1308) of patients on Otezla, compared to 0.2% (1/506) on placebo. Carefully weigh the risks and benefits of treatment with Otezla for patients with a history of depression and/or suicidal thoughts/behavior, or in patients who develop such symptoms while on
START your patients on Otezla today

- Convenient oral dosing
- No required lab monitoring
- Samples available in office
- Bridge program offers 3 years for free
- $0 co-pay

Otezla. Patients, caregivers, and families should be advised of the need to be alert for the emergence or worsening of depression, suicidal thoughts or other mood changes, and they should contact their healthcare provider if such changes occur.

- Weight Decrease: Body weight loss of 5-10% occurred in 12% (96/784) of patients treated with Otezla and in 5% (19/382) of patients taking placebo. Monitor body weight regularly; evaluate unexplained or clinically significant weight loss, and consider discontinuation of Otezla.

- Drug Interactions: Apremilast exposure was decreased when Otezla was co-administered with rifampin, a strong CYP450 enzyme inducer; loss of Otezla efficacy may occur. Concomitant use of Otezla with CYP450 enzyme inducers (e.g., rifampin, phenobarbital, carbamazepine, phenytoin) is not recommended.

Adverse Reactions

- Adverse reactions reported in ≥5% of patients were (Otezla®, placebo%): diarrhea (17, 6), nausea (17, 7), upper respiratory tract infection (9, 6), tension headache (8, 4), and headache (6, 4).

Use in Specific Populations

- Pregnancy and Nursing Mothers: Otezla is Pregnancy Category C; it has not been studied in pregnant women. Use during pregnancy only if the potential benefit justifies the potential risk to the fetus. It is not known whether apremilast or its metabolites are present in human milk. Caution should be exercised when Otezla is administered to a nursing woman.

- Renal Impairment: Otezla dosage should be reduced in patients with severe renal impairment (creatinine clearance less than 30 mL/min); for details, see Dosage and Administration, Section 2, in the Full Prescribing Information.

*Following a 5-day initiation, the recommended maintenance dosage is 30 mg twice daily.

†To receive a free bridge supply of Otezla, patients must have an on-label diagnosis and be denied or waiting for coverage. Patients in Massachusetts are not eligible to receive bridge.

‡Certain restrictions apply; eligibility not based on income, must be 18 years or older. This offer is not valid for persons eligible for reimbursement of this product, in whole or in part under Medicaid, Medicare, or similar state or federal programs. Offer not valid for cash-paying patients. People who are not eligible can call 1-844-4OTELA to discuss other financial assistance opportunities.

BSA, body surface area; ESTEM, Efficacy and Safety Trial Evaluating the Effects of Apremilast in Psoriasis; PASI, Psoriasis Area and Severity Index; SPGA, static Physician Global Assessment.


Please turn the page for Brief Summary of Full Prescribing Information.

Otezla® is a registered trademark of Celgene Corporation.
© 2018 Celgene Corporation 03/18 USII-APR180046a
OTEZLA® (apremilast) tablets, for oral use

The following is a Brief Summary; refer to Full Prescribing Information for complete product information.

INDICATIONS AND USAGE
OTEZLA® (apremilast) is indicated for the treatment of patients with moderate to severe plaque psoriasis who are candidates for phototherapy or systemic therapy.

CONTRAINDICATIONS
OTEZLA is contraindicated in patients with a known hypersensitivity to apremilast or to any of the excipients in the formulation [see Adverse Reactions (6.1)].

WARNINGS AND PRECAUTIONS
Diarrhea, Nausea, and Vomiting: There have been postmarketing reports of severe diarrhea, nausea, and vomiting associated with the use of OTEZLA. Most events occurred within the first few weeks of treatment. In some cases patients were hospitalized. Patients 65 years of age or older and patients taking medications that can lead to volume depletion or hypotension may be at a higher risk of complications from severe diarrhea, nausea, or vomiting. Monitor patients who are more susceptible to complications of diarrhea or vomiting. Patients who reduced dosage or discontinued OTEZLA generally improved quickly. Consider OTEZLA dose reduction. The most common adverse reactions leading to discontinuation of diarrhea, nausea, or vomiting included severe diarrhea, nausea, or vomiting.

Depression: Treatment with OTEZLA is associated with an increase in adverse reactions of depression. Before using OTEZLA in patients with a history of depression and/or suicidal thoughts or behavior prescribers should carefully weigh the risks and benefits of treatment with OTEZLA in such patients. Patients, their caregivers, and families should be advised of the need to be alert for the emergence of or worsening of depression, suicidal thoughts or other mood changes, and if such changes occur to contact their healthcare provider. Prescribers should carefully evaluate the risks and benefits of continuing treatment with OTEZLA if such events occur. During the 0 to 16 week placebo-controlled period of the 3 controlled clinical trials, 1.3% (12/920) of patients treated with OTEZLA discontinued treatment due to depression compared with none in placebo-treated patients (0/506). Depressive reactions were observed with severe depression in 0.1% (1/1308) of patients exposed to OTEZLA, compared to none in placebo-treated patients (0/506). Depression was reported as serious in 0.3% (4/1184) patients treated with OTEZLA 30 mg twice daily compared to 0.4% (2/506) treated with placebo. During the clinical trials, 0.1% (11/1308) of patients treated with OTEZLA discontinued treatment due to depression compared with none in placebo-treated patients (0/506). Depression was reported as serious in 0.1% (1/1308) of patients exposed to OTEZLA, compared to none in placebo-treated patients (0/506). Instances of suicidal behavior have been observed in 0.1% (1/1308) of patients while receiving OTEZLA, compared to 0.2% (1/506) in placebo-treated patients. In the clinical trials, one patient treated with OTEZLA attempted suicide while one who received placebo committed suicide.

Weight Decrease: During the controlled period of the trials in psoriasis, weight decrease between 5%-10% of body weight occurred in 12% (96/784) of patients treated with OTEZLA compared to 5% (19/382) treated with placebo. Weight decrease of 210% of body weight occurred in 2% (16/784) of patients treated with OTEZLA 30 mg twice daily compared to 5% (3/382) patients treated with placebo. Patients treated with OTEZLA should have their weight monitored regularly. If unexplained or clinically significant weight loss occurs, weight loss should be evaluated, and discontinuation of OTEZLA should be considered.

Drug Interactions: Co-administration of strong cytochrome P450 enzyme inducer, rifampin, resulted in a reduction in systemic exposure of apremilast, which may result in loss of efficacy of OTEZLA. Therefore, the use of cytochrome P450 enzyme inducers (e.g., rifampin, phenobarbital, carbamazepine, phenytoin) with OTEZLA is not recommended [see Drug Interactions (7.1) and Clinical Pharmacology (12.3)].

ADVERSE REACTIONS
Clinical Trials Experience in Psoriasis: Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trial of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in clinical practice. Diarrhea, nausea, and upper respiratory tract infection were the most commonly reported adverse reactions leading to discontinuation of treatment for patients taking OTEZLA were nausea (1.5%), diarrhea (1.0%), and headache (0.8%). The proportion of patients with psoriasis who discontinued treatment due to any adverse reaction was 6.1% for patients treated with OTEZLA 30 mg twice daily and 4.1% for placebo-treated patients.

Table 3: Adverse Reactions Reported in 21% of Patients on OTEZLA and With Greater Frequency Than in Patients on Placebo; up to Day 112 (Week 16)

<table>
<thead>
<tr>
<th>Preferred Term</th>
<th>Placebo (N=506)</th>
<th>OTEZLA 30 mg BID (N=920)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diarrhea</td>
<td>32 (6)</td>
<td>160 (17)</td>
</tr>
<tr>
<td>Nausea</td>
<td>35 (7)</td>
<td>155 (17)</td>
</tr>
<tr>
<td>Upper respiratory tract infection</td>
<td>31 (6)</td>
<td>84 (9)</td>
</tr>
<tr>
<td>Tension headache</td>
<td>21 (4)</td>
<td>75 (8)</td>
</tr>
<tr>
<td>Headache</td>
<td>19 (4)</td>
<td>56 (6)</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>11 (2)</td>
<td>39 (4)</td>
</tr>
<tr>
<td>Vomiting</td>
<td>8 (2)</td>
<td>35 (4)</td>
</tr>
<tr>
<td>Fatigue</td>
<td>9 (2)</td>
<td>29 (3)</td>
</tr>
<tr>
<td>Decrease appetite</td>
<td>5 (1)</td>
<td>26 (3)</td>
</tr>
<tr>
<td>Insomnia</td>
<td>4 (1)</td>
<td>21 (2)</td>
</tr>
<tr>
<td>Back pain</td>
<td>4 (1)</td>
<td>20 (2)</td>
</tr>
<tr>
<td>Migraine</td>
<td>5 (1)</td>
<td>19 (2)</td>
</tr>
<tr>
<td>Frequent bowel movements</td>
<td>1 (0)</td>
<td>17 (2)</td>
</tr>
<tr>
<td>Depression</td>
<td>2 (0)</td>
<td>12 (1)</td>
</tr>
<tr>
<td>Bronchitis</td>
<td>2 (0)</td>
<td>12 (1)</td>
</tr>
<tr>
<td>Tooth abscess</td>
<td>0 (0)</td>
<td>10 (1)</td>
</tr>
<tr>
<td>Folliculitis</td>
<td>0 (0)</td>
<td>9 (1)</td>
</tr>
<tr>
<td>Sinus headache</td>
<td>0 (0)</td>
<td>9 (1)</td>
</tr>
</tbody>
</table>

*Two subjects treated with OTEZLA experienced serious adverse reaction of abdominal pain.

Severe worsening of psoriasis (rebound) occurred in 0.3% (4/1184) patients following discontinuation of treatment with OTEZLA (apremilast).

DRUG INTERACTIONS
Strong CYP 450 Inducers: Apremilast exposure is decreased when OTEZLA is co-administered with strong CYP450 inducers (such as rifampin) and may result in loss of efficacy [see Warnings and Precautions (5.3) and Clinical Pharmacology (12.3)].

USE IN SPECIFIC POPULATIONS
Pregnancy: Pregnancy Category C: OTEZLA should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. Pregnancy Exposure Registry: There is a pregnancy exposure registry that monitors pregnancy outcomes in women exposed to OTEZLA during pregnancy. Information about the registry can be obtained by calling 1-877-371-8972. Nursing Mothers: It is not known whether OTEZLA or its metabolites are present in human milk. Because many drugs are present in human milk, caution should be exercised when OTEZLA is administered to a nursing woman. Pediatric use: The safety and effectiveness of OTEZLA in pediatric patients less than 18 years of age have not been established. Geriatric use: Of the 1257 patients who enrolled in two placebo-controlled psoriasis trials (PSOR 1 and PSOR 2), a total of 108 psoriasis patients were 65 years of age and older, including 9 patients who were 75 years of age and older. No overall differences were observed in the efficacy and safety in elderly patients ≥65 years of age and younger adult patients <65 years of age in the clinical trials. Renal impairment: Apremilast pharmacokinetics were characterized in subjects with mild, moderate, and severe renal impairment as defined by a creatinine clearance of 60-89, 30-59, and less than 30 mL per minute, respectively, by the Cockcroft–Gault equation. While no dose adjustment is needed in patients with mild or moderate renal impairment, the dose of OTEZLA should be reduced to 30 mg once daily in patients with severe renal impairment [see Dosage and Administration (2.2) and Clinical Pharmacology (12.3)].

Hepatic Impairment: Apremilast pharmacokinetics were characterized in patients with moderate (Child Pugh B) and severe (Child Pugh C) hepatic impairment. No dose adjustment is necessary in these patients.

OVERDOSAGE
In case of overdose, patients should seek immediate medical help. Patients should be managed by symptomatic and supportive care should there be an overdose.

Manufactured for: Celgene Corporation, Summit, NJ 07901
Topical treatment reduces acne scars
- Topical gel prevents and reduces atrophic scar formation in acne.

Know the visual signs of depression
- Acne and depression may go hand in hand.

10 Treatments for acne scarring
- A summary of current and emerging treatments.

The emphasis on therapy is follicular rescue as the follicles are permanently destroyed in frontal fibrosing alopecia.”

Jerry Shapiro, M.D., New York University School of Medicine

Frontal fibrosing alopecia typically occurs on the frontotemporal region of the scalp. It can also occur in the upper periauricular and occipital localization (hair loss behind the ears). In some cases, the band of alopecia stretches around the head completely (circumferential fibrosing alopecia).

Treatments include: antimalarials, tetracyclines, intralesional cortisone, topical tacrolimus, cortisone and minoxidil. There is a tiered approach to managing these cases. Twenty five percent of Dr. Shapiro’s practice consists of frontal fibrosing alopecia. The emphasis on therapy is follicular rescue as the follicles are permanently destroyed in frontal fibrosing alopecia. This is a scarring process. The use of certain products with sunscreens has been associated with an increased likelihood of having frontal fibrosing alopecia, Dr. Shapiro said. One study based on questionnaires about exposure to a wide range of lifestyle, social and medical factors found that twice as many women with the frontal fibrosing alopecia group had used a sunscreen compared with controls - a difference that was highly significant.

Women with frontal fibrosing alopecia also showed a trend towards more frequent use of facial moisturizers and foundations, although this just failed to reach statistical significance. A subsequent study in men found a similar association with the use of facial moisturizers and sunscreens.

Studies with men and women suggest there may be an association between frontal fibrosing alopecia and the use of facial moisturisers with sunscreens.” The sunscreen ingredients that may be implicated are the ones that were approved by the FDA in 1988 as the condition was first reported in 1994. This association still needs to be proven more conclusively.

Reference
Nav 1.7 in itch for both diseases. “Interestingly, the TRP cation channel subfamily M member 8 (TRPM8) receptor, which is the receptor for the cooling agent menthol, is overexpressed in psoriatic itching,” Dr. Yosipovitch says. “Therefore, most patients that have psoriasis with itch will not be helped by over-the-counter topical cooling agents such as menthol that are often prescribed by dermatologists for itch of different types.”

The study is relevant to companies developing therapy. It is also helpful to clinicians in understanding that some drugs now in development may have a yield beyond just one disease, such as other types of chronic itch like prurigo nodularis, where the common pathway is neurokinin 1 or the kappa opioid receptors in the nerves.

The study enrolled mainly Caucasians and Asians. “There have been reports that there are differences in genetic perception between ethnic groups,” Dr. Yosipovitch says. “Our patient population is too small, though, to provide a meaningful conclusion about the differences among ethnicities.”

**Disclosures:** The study was funded by the LEO Foundation in Denmark. Dr. Yosipovitch has served as a consultant or advisory board member to Galderma, Menlo, Trevi, Sanofi, Novartis and Eli Lilly.

**Reference**

---

**Itch study relevant to companies developing therapies**

**FROM PAGE 46**

IL-23 pathway causes inflammation. In enthesitis, IL-23 leads to release of IL-17 and IL-22, which is a known psoriasis trigger (i.e., the Koebner phenomenon). “Therefore, most patients that have psoriasis which affects the palms and soles, one theory is that these areas experience continual trauma from daily activities, which is a known psoriasis trigger (i.e., the Koebner phenomenon).”

As a caveat, he added that the study excluded palmoplantar psoriasis (PPP) – psoriasis which affects only the palms and/or soles, and no other body locations. When patients have plaques on the palms or soles and the body, he said, the palms and soles respond better than when patients have PPP, or exclusively palmoplantar disease.

“We get that question a lot – what do you do for palmoplantar psoriasis? We think of that as a different disease entity compared to people with plaque psoriasis that includes palm and sole involvement,” going forward, said Dr. Blauvelt, it will be important to study whether PPP responds to guselkumab as well as the palms and soles did in the present analysis.

**Disclosures:** Dr. Blauvelt is a scientific advisor and clinical investigator for AbbVie and Janssen, as well as a speaker for Janssen.

**Reference**

---

**IL-23 is a promising treatment target in psoriatic arthritis**

**FROM PAGE 49**

**Guselkumab from baseline to week 24**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Placebo (n=49)</th>
<th>Guselkumab (n=100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of swollen joints (0-66)</td>
<td>-11.8% (–59.1 to 11.8)</td>
<td>-84.1% (–100.0 to –43.2)</td>
</tr>
<tr>
<td>Number of tender joints (0-68)</td>
<td>-5.6% (–53.1 to 30.8)</td>
<td>-70.0% (–89.6 to –23.7)</td>
</tr>
<tr>
<td>Patient’s assessment of pain (VAS 0-100 mm)</td>
<td>2.4% (–20.9 to 32.8)</td>
<td>-32.9% (–70.7 to –7.6)</td>
</tr>
<tr>
<td>Patient’s global assessment of disease activity (VAS 0-100 mm, arthritis)</td>
<td>-2.2% (–26.8 to 26.1)</td>
<td>-35.5% (–68.2 to –7.2)</td>
</tr>
<tr>
<td>Physicin’s global assessment of disease activity (VAS 0-100 mm)</td>
<td>-8.9% (–48.1 to 11.1)</td>
<td>-68.5% (–86.6 to –37.0)</td>
</tr>
<tr>
<td>HAQ-DI score (0-3)</td>
<td>-10.0% (–27.3 to 12.5)†</td>
<td>-28.6% (–52.9 to –8.3)</td>
</tr>
<tr>
<td>C-reactive protein (mg/dl)</td>
<td>7.9% (–30.3 to 93.5)</td>
<td>-42.6% (–77.7 to 2.3)</td>
</tr>
</tbody>
</table>

**Guselkumab findings promising for psoriasis of scalp, palms and soles of feet**

**FROM PAGE 50**

higher incidence of neutropenia – 3 percent of guselkumab-treated patients had grade two neutropenia, and 1 percent had grade three neutropenia. All but one case resolved without stopping treatment, he added. A total of 10 patients discontinued treatment before the final visit due to adverse events and/or lack of efficacy. “What dermatologists can take home from this study is that guselkumab already works on skin and is FDA-approved for this indication. But now it has also been shown to work on the musculoskeletal involvement of psoriatic disease, which we see in 30 percent of psoriasis cases.”

Deodhar et al. already have begun a phase 3 study of guselkumab in PsA.

**Disclosures:** Dr. Deodhar has received research grants and has served on advisory boards for Janssen, maker of guselkumab.

**Reference**
**RETIN-A MICRO 0.06%**

**HOW MANY MORE FACES CAN YOU REACH?**

MORE PATIENTS THAN EVER. RETIN-A MICRO 0.06% gives you more treatment options for your patients, with microsphere technology and pump-controlled dosing.¹

**INDICATION**

RETIN-A MICRO (tretinoin gel) microsphere is indicated for topical application in the treatment of acne vulgaris.

**IMPORTANT SAFETY INFORMATION**

- The skin of certain individuals may become excessively dry, red, swollen or blistered during the use of RETIN-A MICRO.
- Tretinoin has been reported to cause severe irritation on eczematous skin and should be used with utmost caution in patients with this condition.
- If warranted, patients should temporarily reduce the amount or frequency of application, or discontinue use temporarily or altogether. If a reaction suggesting sensitivity occurs, use should be discontinued.
- Unprotected exposure to sunlight, including sunlamps, should be minimized during the use of RETIN-A MICRO, and patients with sunburn should be advised not to use the product until fully recovered because of heightened susceptibility to sunlight with the use of tretinoin.
- Patients should be encouraged to use a sunscreen with a SPF of 15 or higher and protective clothing over treated areas when exposure cannot be avoided.
- Weather extremes, such as wind or cold, also may be irritating to patients under treatment with tretinoin.
- The most common adverse events are mild to moderate irritation (erythema, peeling, dryness, burning/stinging, or itching of the skin).
- RETIN-A MICRO should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus, and caution should be exercised in prescribing for nursing mothers. Safety and efficacy in patients under 12 have not been established.

To report SUSPECTED ADVERSE REACTIONS, contact Ortho Dermatologies at 1-800-321-4576 or FDA at 1-800-FDA-1088 or visit www.fda.gov/medwatch.

Please see Brief Summary of full Prescribing Information on the following page.

---

BRIEF SUMMARY OF PRESCRIBING INFORMATION

This Brief Summary does not include all the information needed to use RETIN-A MICRO safely and effectively. See full prescribing information for RETIN-A MICRO.

RETIN-A MICRO® (tretinoin) gel microsphere, 0.1%, 0.08%, 0.06% and 0.04%, for topical use
Initial U.S. Approval: 1971

INDICATIONS AND USAGE

Retin-A Micro® is a retinoid indicated for topical application in the treatment of acne vulgaris.

CONTRAINDICATIONS

None.

WARNINGS AND PRECAUTIONS

Local irritation
The skin of certain individuals may become excessively dry, red, swollen, or blistered.

Tretinoin has been reported to cause severe irritation on eczematous skin and should be used with utmost caution in patients with this condition.

If the degree of irritation warrants, patients should be directed to temporarily reduce the amount or frequency of application of the medication, discontinue use temporarily, or discontinue use altogether. Efficacy at reduced frequencies of application has not been established. If a reaction suggesting sensitivity occurs, use of the medication should be discontinued.

To help limit skin irritation, patients must:
• wash the treated skin gently, using a mild, non-medicated soap, and pat it dry, and
• avoid washing the treated skin too often or scratching it hard when washing.

Patients should apply a topical moisturizer if dryness is bothersome.

Exposure to Ultraviolet Light or Weather Extremes
Unprotected exposure to sunlight, including sunlamps (UV light) should be avoided or minimized during the use of Retin-A Micro and patients with sunburn should be advised not to use the product until fully recovered because of heightened susceptibility to sunlight as a result of the use of tretinoin. Patients who may require to have been extended periods of UV exposure (e.g., due to occupation or sports), or those with inherent sensitivity to the sun, or those using medications that cause photosensitivity, should exercise particular caution of sunscreen products (SPF 15 or higher) and protective clothing over treated areas are recommended when exposure cannot be avoided [see Nonclinical Toxicology].

Weather extremes, such as wind or cold, also may be irritating to tretinoin-treated skin.

ADVERSE REACTIONS

Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

Clinical Trials in Subjects with Acne

In separate clinical trials for each concentration, acne subjects treated with Retin-A Micro (tretinoin) Gel microsphere, 0.1% or 0.04%, over the twelve-week period showed that cutaneous irritation scores for erythema, peeling, dryness, burning/stinging, or itching peaked during the initial two weeks of therapy, decreasing thereafter.

Approximately half of the subjects treated with Retin-A Micro, 0.04%, had cutaneous irritation at Week 2. Of effects, most had mild cutaneous irritation, minor, mild severity; and 5% had skin dryness at Week 2. In another clinical trial, approximately one-third of the subjects treated with Retin-A Micro, 0.04%, had mild to moderate cutaneous irritation and there was no severe irritation at Week 2.

In trials of Retin-A Micro (tretinoin) Gel microsphere, 0.04%, throughout the treatment period the majority of subjects experienced some degree of irritation (mild, moderate, or severe) with 1% (2/225) of subjects having scores indicative of a severe irritation; 13% (3/225) of subjects treated with Retin-A Micro (tretinoin) Gel microsphere, 0.04%, discontinued treatment due to irritation, which included dryness in one patient because of heightened susceptibility to sunlight as a result of the use of tretinoin. Patients who may be required to have extended periods of UV exposure (e.g., due to occupation or sports), or those with inherent sensitivity to the sun, or those using medications that cause phototoxicity should exercise particular caution if sunscreen products (SPF 15 or higher) and protective clothing over treated areas are recommended when exposure cannot be avoided [see Nonclinical Toxicology].

Weather extremes, such as wind or cold, also may be irritating to tretinoin-treated skin.

OVERDOSAGE

Oral ingestion of large amounts of the drug may lead to the same side effects as those associated with excessive oral intake of Vitamin A.

NONCLINICAL TOXICOLOGY

Carcinogenesis, Mutagenesis, Impairment of Fertility

Dermal carcinogenicity testing has not been performed with Retin-A Micro (tretinoin) Gel microsphere, 0.1%, 0.08%, 0.06% or 0.04%.

In a 91-week dermal study in which CD-1 mice were administered 0.017% and 0.035% formulations of tretinoin, cutaneous squamous cell carcinomas and papillomas in the treatment area were observed in some female mice. These concentrations are near the tretinoin concentration of 0.04% and 0.1% clinical formulations. A dose-related incidence of liver tumors in male mice was observed at those same concentrations. The maximum systemic exposure associated with the administered 0.017% and 0.035% formulations are 0.5 and 1.0 mg/kg/day tretinoin, respectively. These doses are two and four times the MRHD based on BSA comparison.

The biological significance of these findings is not clear because they occurred at doses that exceeded the dermal maximally tolerated dose of tretinoin and because they were within the background natural occurrence rate for these tumors in this strain of mice.

There was no evidence of carcinogenic potential when 0.025 mg/kg/day of tretinoin was administered topically to mice (0.1 times the MRHD based on BSA comparison). Studies in hairless albino mouse animals are not a valid model for determining the tumorigenic potential of dermal applications of UVB and UVA light from a solar simulator. This effect has been confirmed in a later study in pigmented mice, and dark pigmentation did not overcome the enhancement of photocarcinogenesis by 0.05% tretinoin. Although the significance of these studies to humans is not clear, oral administration should minimize exposure to sunlight or artificial ultraviolet irradiation sources [see Warnings and Precautions].

The genotoxic potential of tretinoin was evaluated in the Ames assay and in the in vivo mouse micronucleus assay, both of which were negative.

The components of the microspheres have shown potential for genetic toxicity and tretinoin formulation. EGF-C1, component 1 of the excipient, is genotoxic in the in vitro chromosomal aberration assay in mammalian cells in the absence of metabolic activation, and negative for genetic toxicity in the Ames assay, and in the in vivo mouse micronucleus assay.

In oral fertility studies in rats with tretinoin, the no-observable effect level was 2 mg/kg/day (19 times the MRHD based on BSA comparison).

PATIENT COUNSELING INFORMATION

Advise the patient to read the FDA-approved patient labeling (Patient Information).

Manufactured for:

Valeant Pharmaceuticals North America LLC
3601 Swede Way, Irvine, CA 92618

By:

Valeant Pharmaceuticals International, Inc.
Laval, Quebec H7L 4A6, Canada

Retin-A Micro is a trademark of Valeant Pharmaceuticals International, Inc. or its affiliates.

Microsponge is a registered trademark of AMCOL International Corporation. Any other product/brand names are trademarks of the respective owners.

©Valeant Pharmaceuticals North America LLC

Based on 9612500 October 2017 RAM.0025.USA.17
The results support diminished ovarian reserve in premenopausal women with psoriasis, however, ovarian reserve tests do not correlate with disease severity.


35 women without psoriasis also participated. The median age of the psoriasis group was 31 with an average body mass index of 27.39. The control group was statistically similar with an average age of 29 and 24.24, respectively. The median age for women in both groups for their first period was 13.

OVARIAN FUNCTION

To determine ovarian function, investigators took blood samples from both groups during their menstrual cycle’s early follicular phase (days 2-4) to analyze E2, FSH, LH, and thyroid stimulating hormone levels. A gynecologist also used transvaginal ultrasound to assess women’s ovarian volume and to measure total antral follicles sized 2-10mm in diameter.

According to study results, participants with psoriasis had substantially higher FSH levels than the control group (6.76 (1.96); 5.71 (2.24), respectively, p<0.05). Higher FSH levels indicate follicle depletion. Additionally, FSH/LH ratio was higher in psoriasis patients than the control group (1.52 (0.86); 0.92 (0.54), respectively, p<0.05). This ratio also points to a diminishing ovarian reserve. Psoriasis patients’ AFC was also significantly lower than the controls (5 (2.5); 7 (4.5), respectively, p<0.05). AFC is known to decline with age.

However, there were no noticeable differences among other hormone levels, ovarian, or uterus volumes.

“Results support diminished ovarian reserve in premenopausal women with psoriasis,” the authors wrote.

Findings did not indicate a significant difference in the incidence of spontaneous abortion between women with psoriasis and the control group. Existing research is also contradictory on the rate of this pregnancy outcome.

The study did have limitations, the authors wrote. Investigations didn’t adequately assess AMH levels. This measurement is a leading clinical ovarian reserve assessment factor. In addition, the patient population didn’t include enough women with severe psoriasis.

Based on study findings, women of reproductive age with psoriasis could benefit from additional medical services surrounding pregnancy, according to the authors.

“Early referral to a reproductive endocrinologist or obstetrician when there is a risk of diminished ovarian reserve can improve pregnancy planning and management, especially before starting systemic treatment for psoriasis,” they wrote.

Reference


Mastering the nail biopsy

In clinic evaluations may differ from biopsy results

JOHN JESITUS | Staff Correspondent

Helping a dermatopathologist diagnose neoplasms and infections of the foot requires not only taking adequate samples, but in many cases, sending clinical photographs with them, physicians reported at DERMfoot 2018.

“When we see patients in the clinic,” said Dallas-based dermatopathologist Clay J. Cockerell, M.D., “we formulate one set of diagnoses. When we see things under the microscope, we might formulate something else.”

When dealing with nail lesions that present as a pigmented band, clinical photos are especially important. They can show whether a lesion involves the proximal nail fold — the Hutchinson’s sign — and whether it is broader at the base than distally. This Christmas tree sign indicates that it very likely melanoma.

But when dermatologists encounter nail issues, “they may not be as enthusiastic about dealing with them as podiatrists may be. Dermatologists don’t like to take biopsies of the nail unit. They are difficult to prepare for and require a special setup. And, nail biopsies can slow down the pace of your clinic. And for the patient, the procedure is painful and inconvenient.”

Biopsies are unavoidable in some cases — especially for conditions that have not responded to therapy in a reasonable period of time. Problems impacting just one nail also represent red flags.

When assessing potential cancers such as melanoma or squamous cell carcinoma, “don’t get cavalier. Sometimes you have to bite the bullet and take a full-thickness biopsy of the nail unit even though it might be inconvenient. We’ve seen a number of tragic cases over the years in which the biopsy was delayed, resulting in poor outcomes and sometimes lawsuits.”

In one case, a female patient in her 30s had been seen by a podiatrist and a dermatologist for long-standing nail dystrophy. “She was treated with topical soaks for the nail and was given antifungal preparations,” he said. One of

Quick Takes

Yes, biopsies take time, but they are necessary.

If necessary, refer the patient to another specialist who can perform the biopsy.

Nail clippings may not always be enough. A biopsy into the nail matrix may be the safest choice.
Gentle, selective fat destruction

UltraShape® Power is a body-contouring system that delivers non-thermal, pulsed ultrasound waves to selectively destroy fat cells in a walk-in, walk-out procedure.

Area treated: abdomen. In 3 treatments spaced 2 weeks apart, subject lost nearly 9 cm. Baseline: 89.5 cm. Post treatment: 80.7 cm. Weight loss: 3.1%. *

- FDA cleared1,2
- Non-invasive solution for fat destruction and body contouring in the abdomen, flanks, and thighs1,2
- Selectively targets and breaks down fat cells through focused ultrasound3
- Truly comfortable with a pain score of <1 on a 10-point scale4
- Statistically significant abdominal circumference reduction of 2.4 cm to 2.6 cm and a 3.63 mm fat thickness reduction, on average5,6,8a

For more information about UltraShape Power, visit syneron-candela.com or contact your local Syneron Candela sales representative at 800-733-8550.

* In a clinical study at 12 weeks following the third treatment.

© 2018 Syneron Candela. This material contains registered trademarks, trade names and brand names of Syneron Candela or its subsidiaries, including Syneron, Candela, and UltraShape. All other trademarks are the property of their respective owners. All rights reserved. PB58253BN-NA October 2017
Baseline levels of lactate dehydrogenase (LDH) are significantly associated with progression-free survival (PFS) outcomes in patients with BRAF V600-mutated metastatic melanoma treated with BRAF and/or MEK inhibitors, according to a new study. Other baseline factors associated with outcome included ECOG performance status, disease burden, and gene signature.

"Extended follow-up of studies evaluating BRAF-inhibitor monotherapy or combined BRAF and MEK inhibition show a plateau in survival curves beyond about three years, suggestive of a subgroup of patients with prolonged survival," wrote study authors led by Axel Hauschild, M.D., of University Hospital Schleswig-Holstein in Kiel, Germany. "The development of prognostic models may provide insight into clinical trial results and inform clinical decision making in the management of patients with metastatic melanoma."

The new retrospective study used recursive partitioning analysis (RPA) to model associations between baseline variables and survival outcomes in 1,365 patients in the BRIM-2, BRIM-3, BRIM-7, and coBRIM studies. Most of the cohort (75.6%) was older than 65 years; 310 patients were treated with cobimetinib plus vemurafenib, 717 received vemurafenib alone, and 338 received dacarbazine. The results of the study were published in JAMA Oncology.

In the full cohort, baseline LDH level was the strongest determinant of PFS. Other factors significantly prognostic of PFS included ECOG performance status, presence or absence of liver metastases, and baseline sum of longest diameters of target lesions (SLDs).

A group with elevated LDH levels less than or equal to twice the upper limit of normal, an ECOG performance status score of 0, and SLD less than or equal to 44 mm had the longest median PFS at 11.1 months. Elevated LDH level greater than twice the upper limit of normal defined the group with shortest PFS, at 3.5 months.

The three-year PFS rate was 51.8% with cobimetinib plus vemurafenib treatment. Three-year PFS rate for the vemurafenib group was 26%. Three-year PFS rate for the dacarbazine group was 0%.

Three-year PFS rate for the vemurafenib group was 26%.

Three-year PFS rate for the dacarbazine group was 0%.

Similar results were seen for overall survival (OS), again with baseline LDH level emerging as the strongest prognostic factor. Median OS was longest in patients with normal LDH levels and an SLD of no more than 45 mm (22.7 months), and it was shortest in patients with LDH levels greater than twice the upper limit of normal (6.0 months).

In a subset of patients for whom gene expression analysis was available, those categorized as having an immune gene signature had improved PFS and OS compared with those with a cell cycle signature. "As baseline immune status has also been shown to predict improved clinical outcomes among melanoma patients treated with anti-PD-1, this result raises the possibility that immune assessments should be integrated into the clinical assessment of all stage IV melanoma patients, and potentially utilized in the design of clinical trials of targeted therapies in addition to immune therapies," said Michael A. Davies, MD, PhD, of the University of Texas MD Anderson Cancer Center, a melanoma expert who was not involved with this study.

Davies said the results regarding elevated LDH levels are largely consistent with previous research, and "reinforce the critical need to improve our understanding and treatments for metastatic melanoma patients with elevated serum LDH levels."
A retrospective analysis found that immune checkpoint inhibitors initiated soon before or after radiosurgery offer excellent outcomes in patients with brain metastases originating from melanoma. Additionally, there was an advantage with regard to several outcomes for anti-programmed death 1 (PD-1) agents compared with anti-cytotoxic T-lymphocyte–associated antigen 4 (CTLA-4) agents.

“Immune checkpoint inhibitors have documented activity in the central nervous system (CNS), and emerging data suggest outcomes after radiosurgery might be improved in patients receiving immune checkpoint inhibitors,” wrote study authors led by Tyler P. Robin, M.D., Ph.D., of the University of Colorado. The researchers reviewed a single institution’s experience with patients who underwent Gamma Knife radiosurgery and who received immune checkpoint inhibitor therapy within 8 weeks before or after the surgery.

The study included a total of 38 patients, 55% of whom were under the age of 70 years. Most patients were male (63%), and most did not have BRAF-mutant melanoma (68%). The majority of patients (63%) had 1 to 3 treated brain metastases, and 58% had a volume of treated brain metastases of < 1 cc. The results of the study were published in the *Journal of Neuro-Oncology*.

The median follow-up time for all patients was 31.6 months. The 2-year patient-based and lesion-based local control rates were 81% and 92%, respectively. For the full cohort, the median time to out-of-field CNS progression was 8.4 months, and the median time to extra-CNS progression was 7.9 months. The median progression-free survival was 3.4 months, while the median overall survival was not yet reached.

Patients that received anti-PD-1 therapy or combination therapy did not reach the median time to out-of-field CNS progression, compared with 3.1 months with anti–CTLA-4 therapy (P = .049). Similarly, the time to extra-CNS progression was not reached with anti–PD-1 or combination therapy compared with 4.4 months with anti–CTLA-4 therapy (P = .015), and the median progression-free survival was 20.3 months and 2.4 months, respectively (P = .043).

The researchers also compared patients who received the immune checkpoint inhibitor therapy within seven days of radiosurgery compared with those receiving the drugs outside that window, but no significant differences were seen.

The therapies were generally well tolerated. Three patients had grade 3 CNS toxicity (radiation necrosis); these toxicities were seen only in those receiving anti-CTLA-4 agents. There were no grade four or five toxicities.

The authors noted that this was a retrospective single-institution study and is thus limited by the inherent biases in such studies. “Despite the limitations, this study adds to the emerging body of evidence supporting a benefit to immune checkpoint inhibition and radiosurgery for melanoma brain metastases,” they wrote. “Additional studies exploring this paradigm, with a specific emphasis on class of immune checkpoint inhibitor and timing with radiosurgery, are warranted.”

“Despite the limitations, this study adds to the emerging body of evidence supporting a benefit to immune checkpoint inhibition and radiosurgery for melanoma brain metastases.”

Tyler P. Robin, M.D., Ph.D., University of Colorado
be done properly and the nail matrix will often need to be sampled. Nail clippings will usually not be diagnostic.”

To perform a proper nail unit biopsy, the patient is given a digital block. A tourniquet is used to control bleeding and special instruments are used to split or remove the nail plate. Dermatologists are trained to perform nail unit biopsies in their residency programs, he said. "If you live in a community with a physician who knows how to take a nail biopsy and can do it relatively quickly and easily, you can always refer your patient to them. But dermatologists should know how to perform a nail biopsy. The problem is that dermatologists are busy with a lot of patients and nail biopsies can throw a monkey wrench into the works. If your patient needs it, however, either refer him or her to someone, or reschedule the patient for the procedure."

In some cases, dermatologists refer patients to dermatologic surgeons for nail unit biopsies.

Reference


“Suspected nail melanomas should include biopsies of the matrix FROM PAGE 60

her doctors eventually submitted a nail clipping for pathology. The clipping revealed nothing remarkable, and the patient was instructed to continue treatment as usual. “Finally, when the nail plate eventually fell off, the physician took a biopsy of the underlying nail unit epithelium. Unfortunately, it revealed the presence of melanoma. When performing a biopsy of a possible melanoma, get into the nail matrix, which is proximal in the nail unit. If you take just a clipping or something off the distal end of the nail, you’re not going to get the appropriate material in the vast majority of cases,” he said.

In this case, a larger and deeper biopsy eventually revealed a large thick amelanotic melanoma. “The lesson in this case is that if something in the nail doesn’t look right, consider getting a biopsy sooner rather than later — at least within a couple of months. Don’t wait a couple of years.”

Being unable to diagnose a challenging disease from an adequate biopsy is one thing, “but if you’re hindered from making the diagnosis because of the way the biopsy was taken, that’s a tragedy for the patient, dermatologist and dermatopathologist. If you’re going to do a biopsy, it has to be a home run from the beginning. Make absolutely certain that you’re doing it right. Get plenty of tissue. Every biopsy should be sent to someone who knows what they’re looking at under the microscope.”

Those who don’t routinely practice dermatopathology probably won’t be comfortable interpreting nail biopsies. “This is not something that a general pathologist should generally interpret because they are not seeing enough of these biopsies, which can be very complicated to diagnose properly,” Dr. Cockerell said.

Another case involved a 39-year-old male who was treated with antifungal medication for three years. A nail unit biopsy in Dr. Cockerell’s clinic revealed a squamous cell cancer that was causing longstanding nail dystrophy.

When tumors or inflammatory diseases such as pemphigus, psoriasis or lichen planus cause nail dystrophy, the changes may be relatively non-specific and can simulate one another. “Biopsying the nail unit will tell you what’s causing that dystrophy. However, the biopsy needs to be done properly and the nail matrix will often need to be sampled. Nail clippings will usually not be diagnostic.”

To perform a proper nail unit biopsy, the patient is given a digital block. A tourniquet is used to control bleeding and special instruments are used to split or remove the nail plate.

Dermatologists are trained to perform nail unit biopsies in their residency programs, he said. “If you live in a community with a physician who knows how to take a nail biopsy and can do it relatively quickly and easily, you can always refer your patient to them. But dermatologists should know how to perform a nail biopsy. The problem is that dermatologists are busy with a lot of patients and nail biopsies can throw a monkey wrench into the works. If your patient needs it, however, either refer him or her to someone, or reschedule the patient for the procedure.”

In some cases, dermatologists refer patients to dermatologic surgeons for nail unit biopsies.

“Diagnosing a patient based on a visual diagnosis is one thing, but a biopsy may reveal a whole other diagnosis, says Dr. Clay Cockerell. The image on the left shows a histology demonstrating Bowen’s disease (SCC in situ) of the nail unit.

Photo courtesy of Clay J. Cockerell, M.D.
CHRISTIE LOVES ULTHERAPY®

Supermodel, actress and entrepreneur Christie Brinkley uses Ultherapy® to keep herself looking as good as she feels. She loves her natural-looking results, and your patients will too!

CHRISTIE BRINKLEY, 63
Supermodel, actress, entrepreneur
Actual Ultherapy Patient

See where you treat with real-time visualization
Generate collagen and elastin deep below the skin’s surface¹²
FDA-cleared to lift & tighten skin on the neck, chin, and brow³

VISIT ULTHERAPY.COM TO BECOME A PROVIDER


The non-invasive Ultherapy® procedure is U.S. FDA-cleared to lift skin on the neck, on the eyebrow and under the chin as well as to improve lines and wrinkles on the décolletage. The most common side effects reported in clinical trials were redness, swelling, pain and transient nerve effects. Reported adverse events from post-marketing surveillance are available in the instructions for use (IFU). Please see the IFU for product and safety information, including a full list of these events at Ultherapym.com/IFU.
Don’t overlook skin cancer checks in psoriasis

LISETTE HILTON | Staff Correspondent

A s dermatologists become increasingly aware of comorbidities associated with psoriasis — either from the chronic inflammatory disease itself or from systemic and other treatments — questions of associated malignancy risk remain.

“There is a lot of conflicting or confusing data in the literature about the risk of cancer in psoriasis patients,” says Megan Noe, M.D., M.P.H., instructor of dermatology at the University of Pennsylvania who spoke on this issue in July at the 2018 American Academy of Dermatology Summer Sessions meeting in Chicago.

Dr. Noe says that, to date, the most consistent findings from large population-based studies suggest that patients with psoriasis are at an increased risk of non-melanoma skin cancer: basal cell carcinoma and squamous cell carcinoma. An increased risk of other types of cancers has not been well established.

But to be on the safe side, Dr. Noe recommends that all her psoriasis patients are up-to-date on all age-appropriate cancer screenings.

“I do think that all psoriasis patients — even those with well-controlled psoriasis — should have a full-body skin check once a year,” Dr. Noe says.

Skin checks can be trickier in patients with uncontrolled or poorly controlled psoriasis. Psoriasis can mimic squamous cell cancer or actinic keratoses. So, it’s important that dermatologists keep that in mind and request patients who are coming in for psoriasis visits always put on gowns for skin checks, she said.

“Especially with my patients with well-controlled psoriasis, they may not always put a gown on for every visit if they feel their skin is OK from a psoriasis standpoint,” she said.

HEIGHTENED CANCER RISK

Dermatologists might be hesitant to use biologics to treat psoriasis patients with an increased risk of cancer or who have histories of cancer. Systemic treatments are immunosuppressive and may heighten cancer risk in these patients, but that doesn’t mean to suggest these patients cannot receive biologic therapy. In these cases, Dr. Noe suggests dermatologists adhere to regular skin checks for these patients.

For patients with histories of other cancer types, prior malignancies do not necessarily disqualify a psoriasis patient from being a candidate for systemic therapy, but it should be prescribed with caution and collaboration, she said.

“Every case really needs to be explored on an individual basis, and it usually will include a discussion with the patient’s oncologist because it will depend on what type of cancer, how it was treated and how long ago it was diagnosed. Unfortunately, I think some dermatologists might be hesitant to even consider biologics in patients with a history of malignancy. I think they can be considered in conjunction with the patient’s oncologist,” Dr. Noe said.

There remain gaps in the long-term data looking at many of the biologic treatments approved for psoriasis, with the exception of tumor necrosis factor (TNF) inhibitors.

“We don’t have a lot of long-term data for the newer biologics, that’s important when you’re evaluating cancer risk. Also, these outcomes are very rare. So, you need to treat lots of people in order to really understand what’s going to happen with malignancy risk,” she says.

TNF inhibitors and traditional medications, like methotrexate, have the advantage of long-term safety data.

“We also consider things like phototherapy for psoriasis patients with a history of cancer because that doesn’t have any systemic side effects,” she says.

Overall, malignancy is something that dermatologists should think about and recommend appropriate screening to their psoriasis patients. But it’s not necessarily something that should hinder them from prescribing or patients from receiving appropriate, effective therapy, she said.

Reference

Seborrheic keratosis Tx

FDA-approved Eskata is a first for this common condition

WHITNEY J. PALMER | Staff Correspondent

Until the approval of Eskata (hydrogen peroxide) for the treatment of raised seborrheic keratosis back in December, there was no FDA-approved treatment for this condition.

“Seborrheic keratoses are one of the most frequent diagnoses made by dermatologists. We are proud to offer Eskata as an innovative therapy that addresses a significant unmet need in dermatology,” said Neal Walker, M.D., chief executive officer of Aclaris Therapeutics, the product manufacturer.

Pipeline data about Eskata was presented in July at the 2018 American Academy of Dermatology Summer Meeting in Chicago.

Intended for in-office, dermatologist-applied use only, this 40 percent hydrogen peroxide topical solution is colorless and clear. It can be directly applied to a patient’s seborrheic keratosis using a pen-like applicator in two treatments approximately three weeks apart. Each treatment includes four applications to the targeted lesions roughly one minute apart. Patients can receive a second treatment, as needed.

According to company data, there is no risk to an unborn fetus or breastfeeding infant if the mother uses Eskata. However, you should wear protective nitrile or vinyl gloves when preparing and administering the solution.

Clinical trials were performed to determine whether Eskata was safe and effective for patients. Of the 937 participants included, 42 percent were men, and 58 percent were women. The average age was 68.7 years, and 98 percent were Caucasian.

Each participant was treated with four applications during an initial baseline visit, and an additional treatment was provided at day 22, if needed.

Investigators followed patient progress through day 106. According to study results, 13-23 percent of patients received a clear diagnosis for at least three out of four lesions upon finishing the treatment protocol.

Reference


Quick Takes

Eskata is first treatment approved for SK.

Clinical trials assessed safety and efficacy in 937 participants.

Participants were treated with four applications at baseline and an additional application at day 22, if needed.

BY THE NUMBERS: ESKATA SIDE EFFECTS

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ITCHING</strong></td>
<td><strong>STINGING</strong></td>
<td><strong>CRUSTING</strong></td>
<td><strong>SWELLING</strong></td>
<td><strong>REDNESS</strong></td>
</tr>
<tr>
<td>58%</td>
<td>97%</td>
<td>81%</td>
<td>91%</td>
<td>99%</td>
</tr>
</tbody>
</table>
Lentigo maligna treatment

Low recurrence of lentigo maligna with off-label imiquimod

WAYNE KUZNAR | Staff Correspondent

Two to three months of neoadjuvant topical imiquimod 5% cream prior to conservatively staged excisions for lentigo maligna (LM) is associated with a lower rate of recurrence. The rate of recurrence was similar to that reported with standard staged excisions by either Mohs surgery or en face permanent sections, reported Jessica M. Donigan, M.D., of the University of Utah, Salt Lake City, and colleagues in JAMA Dermatology.

A total of 334 patients with 345 lentigo maligna tumors treated with neoadjuvant imiquimod prior to undergoing conservatively staged excisions with 2 mm margins formed the study population. Patients were treated with imiquimod for five nights per week for a mean of 2.5 months. A mean of 1.2 stages were required to clear the tumor with a mean margin of 3.5 mm (median: 2.0 mm). Some 81% of patients had clear margins after one stage. Neoadjuvant imiquimod resulted in a narrower surgical margin compared with standard staged excisions alone (median: 2 vs. 9.3 mm).

Thirty-seven patients were lost to follow-up; the mean length of follow-up for the remaining 297 was 5.5 years. The lentigo maligna recurrence rate was 3.9% with a mean time to recurrence of 4.3 years. Two of the recurrences were invasive melanoma.

After removing patients who were included in a previously published study, 74 patients (with 75 tumors) in the cohort had used tazarotene in combination with imiquimod. The recurrence rate was 7.6% in the group receiving the combination compared with 2.9% in those receiving imiquimod alone, a difference that was not significant (P=0.19).

“Overall, these results support our opinion that neoadjuvant topical imiquimod allows for the confirmation of a negative histologic margin for lentigo maligna, with a smaller mean surgical margin requirement with consequential lessened cosmetic penalty associated with the surgery,” the investigators concluded.

In an editorial to accompany the study, Fosko et al claim that the study suggests that the benefit of imiquimod in this setting may be its ability to effectively treat lentigo maligna that extends beyond suspected clinical margins and the possibility that it treats background atypical melanocytic hyperplasia. They noted the wide variation in the efficacy of off-label imiquimod for lentigo maligna reported in the literature. “Differences in imiquimod efficacy may be explained by variations in clinical presentation, host factors influencing immune response, variation in treatment frequency, duration and total applications, and the timing of posttreatment histopathologic assessment, making it difficult to group all lentigo maligna together as a single disease,” they wrote.

A potential concern of nonsurgical techniques for lentigo maligna, such as imiquimod, is the lack of histologic confirmation of clearance and accurate monitoring of disease response, they added, raising the possibility of using reflectance confocal microscopy to monitor disease response to imiquimod.

References

Jessica M. Donigan, MD; Mark A. Hyde, MMS, PA-C; David Goldberg, PhD; et al. “Rate of recurrence of lentigo maligna treated with off-label neoadjuvant topical imiquimod. 5%, cream prior to conservatively staged excision” JAMA Dermatology. Published online May 30, 2018. doi:10.1001/jamadermatol.2018.0530

Scott W. Fosko, MD; Cristian P. Navarete-Dechent, MD; Kishwer S. Nehal, MD. “Lentigo maligna—challenges, observations, imiquimod, confocal microscopy, and personalized treatment.” JAMA Dermatology. Published online May 30, 2018. doi:10.1001/jamadermatol.2018.0531

PROS AND CONS OF IMAGING TECHNOLOGIES FOR MELANOMA

By WHITNEY J. PALMER

MONITORING CHANGES in patients with melanoma can be tricky. Using imaging technologies to track these changes can help you stay accurate with your diagnosis.

Jennifer Stein, M.D., Ph.D., associate director of the Pigmented Lesion Section in dermatology at New York University School of Medicine, discussed the use of digital imaging during the 2018 American Academy of Dermatology Summer Meeting.

Using imaging technologies can improve the specificity and sensitivity with which you treat patients, she says.

Total Body Photography (TBP): This method can help identify new changes in patients with atypical nevi for melanoma detection, she says. Being able to more accurately highlight problem spots can reduce the number of unnecessary biopsies. One study reported a 3.8-fold decrease in biopsies when TBP was used correctly, she says. In addition, TotalBody Photography can help patients with self exams because they have previous visual images with which to make comparisons. Another study revealed patients were roughly 12% more likely to accurately identify changes when they had reference photos. TBP can be recommended during six-month checkups for all patients at high risk for melanoma. It best serves patients who have relatively easy neo to manage.

Sequential Digital Dermoscopic Imaging: Sequential Digital Dermoscopic Imaging is a more rigorous form of TBP generally completed on patients who have more aggressive forms of disease.

It’s done in the short term, lasting approximately three months, and requires more frequent visits. Sequential Digital Dermoscopic Imaging is most appropriate for patients who have complex lesions.

TBP Pros and Cons: In addition to monitoring lesion changes, reducing biopsies, and improving self exams, it also decreases patient worry and helps patients who have difficulty tracking moles. However, it is expensive, time consuming, can cause patient discomfort, and presents privacy issues if photos are stored in the general electronic health record.

Convolutional neural networks are the next step in digitally monitoring melanoma progression in patients. This technology can be trained, using several thousands of reference images, to recognize almost any condition.

While it won’t replace you as the dermatologist ultimately responsible for diagnosis and treatment, Dr. Stein, it could potentially help you triage patients and identify high-risk lesions that need immediate attention. It could also be used to screen patients without easy access to a dermatologist, pinpointing which patients would actually need a dermatology referral.

References

Jennifer Stein, M.D., Ph.D. “Advances in Imaging Technology for Melanoma Diagnosis.” American Academy of Dermatology 2018 Summer Meeting, Chicago, Ill., July 28, 10a.m.-1p.m.
How can you optimize your CO₂ laser?

CO₂RE applications beyond cosmetic procedures.

Doctors value CO₂RE laser technology for its reliability, portability and ease of use. When one dermatologist investigated fractional ablative laser treatment for surgical scars at the time of closure, he found even more ways to provide patients with optimal wound care.

In this podcast, Neil Shah, MD describes new applications and potential for the CO₂RE Fractional CO₂ Resurfacing System.

listen to this podcast at dermatologytimes.com/laser-tech
At present, there are no good biologic predictors or biomarkers available to help clinicians identify those individuals who might benefit most from this type of therapy."

Debjani Sahni, M.D., Boston University School of Medicine
Hypophysitis in melanoma

Lose-dose glucocorticoids better for improved outcomes

DAVE LEVITAN | Staff Correspondent

Patients with melanoma who were treated with glucocorticoids for ipilimumab-induced hypophysitis, had improved survival outcomes if they received low-dose vs high-dose glucocorticoids. This is the first study to show that these high doses could affect checkpoint inhibitor (CPI) therapy after an immune-related adverse event (irAE).

“Defects in the immune response are associated with primary and acquired resistance to CPIs,” wrote study authors led by Alexander T. Faje, M.D., of Massachusetts General Hospital in Boston. “High doses of glucocorticoids inhibit the immune response, including some pathways linked to CPI resistance.”

“To test whether glucocorticoid therapy can change outcomes with CPI treatment, the investigators retrospectively reviewed data on a series of patients with the same irAE. They included 98 patients with melanoma and ipilimumab-induced hypophysitis; these were divided between those who received high doses of glucocorticoids (69 patients) and those who received low doses (29 patients). The results of the analysis were published in Cancer.

The full cohort had a median age of 63.4 years, and 67% were men. Most patients were diagnosed with the irAE after several treatment cycles with ipilimumab, at a median of 9.8 weeks from the first dose. Headache and fatigue were the most common presenting symptoms in the study.

Overall survival was significantly longer in the low-dose glucocorticoid group when compared with the high-dose group, with a hazard ratio (HR) of 0.24 (95% CI, 0.07–0.61; P = .002). The same was true for time to treatment failure (TTF), with an HR of 0.28 (95% CI, 0.11–0.62; P = .001). The median overall survival and TTF were not yet reached in the low-dose patients, compared with 23.3 months and 14.5 months, respectively, in the high-dose group. A multivariate analysis did not change these results, specifically in the patients who received ipilimumab as monotherapy.

The median progression-free survival was 35.0 months with low-dose glucocorticoids, compared with 4.9 months with high-dose glucocorticoids, for an HR of 0.36 (95% CI, 0.14–0.77; P = .007).

The patients who received ipilimumab monotherapy and developed hypophysitis (64 patients) had improved overall survival, regardless of glucocorticoid dose, compared with control patients who were treated with the same drug but did not develop the irAE, with an HR of 0.53 (95% CI, 0.36–0.75; P = .0003). The median overall survival in the two groups was 28.2 months and 9.5 months, respectively. This is consistent with other reports that showed that irAEs could be associated with improved survival when treated with CPIs.

“In the current study, patients with hypophysitis, including those who received higher doses of glucocorticoids, had improved overall survival compared with those who did not develop hypophysitis,” the authors wrote. “This finding highlights the importance of comparing the effects of glucocorticoid doses within a population experiencing the same irAE.” They recommended against the routine use of high-dose glucocorticoids in this setting.
Growth on the vermilion lip

Squamous cell carcinomas that metastasize on the vermilion lip

WAYNE KUZNAR | Staff Correspondent

Cutaneous squamous cell carcinomas (cSCCs) that are located on the vermilion lip are at higher risk of nodal metastasis than those located on the cutaneous lip.

In a cohort study of more than 300 patients with cSCCs of the lip, the risk of nodal metastasis was five times greater for vermilion lip tumors compared with cutaneous lip tumors, investigators at Brigham and Women’s Hospital and Harvard Medical School, Boston, have found.

The metastatic potential of vermilion lip tumors has been hypothesized to be greater than cSCCs on the cutaneous lip because of the absence of subcutaneous fat in the vermilion lip, making it more prone to deep invasion.

To test this hypothesis, the researchers identified 303 patients with 310 cSCCs from a query of the Partners HealthCare System Research Patient Data Registry. A total of 138 (44.5%) were located on the cutaneous lip and 172 (55.5%) on the vermilion lip. Some 86% of tumors were less than 2 cm in diameter, 77% were well differentiated, 92% were confined to the dermis, and 93% were free of perineural invasion. Mohs surgery was used as primary treatment in about two thirds (64%).

Tumors on the vermilion lip were more likely to have a larger diameter and more aggressive histologic characteristics than those on the cutaneous lip. On multivariable analysis, the risk of nodal metastasis for cSCCs on the vermilion lip was 5-fold higher than the risk for cSCCs on the cutaneous lip (7.5% vs. 1.5%), independent of depth of invasion (P=0.04).

The authors wrote that the finding “suggests that the recently updated AJCC 8 (American Joint Committee on Cancer) criteria and BWH (Brigham and Women’s Hospital) cSCC staging may not adequately account for the increased risk inherent to vermilion lip location.” They noted that AJCC 8 eliminated a location-based criterion for cSCC of the head and neck “in part because studies in the existing literature have inconsistently analyzed, failed to analyze, or were underpowered to analyze risk differences between the lip zones in cSCC.”

Reference


Skin cancer post organ transplant

Patients develop average of 2.6 cSCCs within seven years of surgery

WAYNE KUZNAR | Staff Correspondent

Recipients of solid organ transplants experience an average of 2.6 cutaneous squamous cell carcinomas (cSCCs) during the seven years after transplant. The latency between the first and second post transplant cSCC varies widely, found investigators from Duke University School of Medicine, Durham, N.C.

In their retrospective study that spanned 11 years, data from 143 renal, hepatic, and cardiothoracic adult transplant patients at Duke Medical Center who experienced a post transplant cSCC were reviewed. Mean age at transplantation was 59.3 years. Of the 143 patients, the mean number of cSCCs was 2.6 over a mean follow-up of 7.2 years.

Twenty patients (14.0%) experienced their second cSCC within six months of their transplant cSCC. The renal group experienced a mean of 3.0 cSCCs compared with a mean of 2.4 in the hepatic group and 2.6 in the cardiothoracic group (P=0.60). Slightly more than half (n=76; 52.8%) experienced 2 or more cSCCs, with a mean latency time between the first and second cSCC of 1.9 years.

The patients who had only 1 cSCC had greater exposure to voriconazole (P<0.001) and mycophenolate (P<0.001) than those who developed at least 2 cSCCs, whereas those who developed at least 2 cSCCs had greater exposure to azathioprine (P=0.003).

Morbidity and mortality are worse in the patients with transplant-associated cSCC compared with the general population without curative systemic treatment options for disseminated disease, the authors noted.

“It is difficult to predict which solid organ transplant recipients will experience a second primary cSCC following transplant. Therefore, ongoing vigilance with frequent dermatologic surveillance beyond the first two to three years after the initial posttransplant cSCC diagnosis should be considered owing to the increased risk in this population,” the authors wrote.

Reference

INTRODUCING

GLYCO-UREA 15-15 KP THERAPY

Breakthrough technology for the appearance of Keratosis Pilaris (KP) and other dry skin conditions

86% of patients agreed the appearance of Keratosis Pilaris (KP) was improved

100% of patients said skin feels softer and smoother

Patented technology

Call today to learn more about our Micro-Branded Skin Care Innovations™
800-445-2595 ext 346 | topixpharm.com
Thermage FLX: Single-session standout

JOHN JESITUS | Staff Correspondent

The new Thermage FLX adds speed and ease of use to the only monopolar radiofrequency (RF) device FDA-cleared for use on body and facial locations, including the eyelids, with a single treatment, according to a physician reporting at The Cosmetic Bootcamp (CBC).

Vic Narurkar, M.D., called Thermage, “the treatment that everybody is doing, but many don’t talk about.” He is founder and director of the Bay Area Laser Institute, chairman of dermatology at California Pacific Medical Center, San Francisco, and a CBC cofounder and director.

These days, he said, more heavily hyped new technologies capture headlines. Initially, Thermage earned a bad rap. “The first-generation Thermage was too painful, overly promoted and created fat atrophy,” said Dr. Narurkar, who has used Thermage for 11 years.

Thermage is the first monopolar, capacitively coupled RF device that has been FDA-indicated for noninvasive treatment of periorbital, facial and body wrinkles, and temporary improvement in the appearance of cellulite. “And it is the only RF device that can be done with a single treatment as shown in peer-reviewed studies, histology and long-term results.”

Thermage is the first RF device with a patent on heating dermal tissue by cross-polarization. “It also has a reverse thermal treatment gradient, so the RF energy is delivered uniformly over the tip.” This allows operators to use a stamping, rather than linear, motion. The reverse thermal gradient delivers heat subcutaneously while keeping surface skin cool. Compared to bipolar RF, the device’s monopolarity provides deeper penetration, down to subcutaneous fat and tissue.

In 2007, the multi-pass NXT protocol made Thermage safer and more tolerable. “But the real game-changer occurred with the use of vibration, added in 2009. This is the gated theory of pain. Just as the dentist grabs your mouth before injecting the needle, the first thing patients feel is vibration, then the RF,” he said.

In the current generation Faster Algorithm Experience (FLX), automatic calibration means that users need not tune the energy delivery system. The device’s single handpiece and touchscreen navigation facilitate ease of use.

Thermage FLX shortens treatment times 33%. Treating the face and neck takes around 60 minutes versus around 20 minutes for eyelids. “I perform all my Thermage treatments myself. I have a relationship with the patient, and a captive audience. We chat about everything,” Dr. Narurkar said.

“I have not had to give any medication for my Thermage FLX. Patients are awake, alert and very comfortable during treatment,” he said. Patients generally experience little or no downtime, just transient redness.

“I tell patients this is not a facelift. The first question I ask is, are you considering anything surgical? The patients who see me already have decided they want a nonsurgical approach, combined with injectables or laser resurfacing,” Dr. Narurkar said. Combination treatments include a two to three month post-treatment wait period before injecting fillers or neuromodulators.

While a single abdominal treatment can tighten loose skin, “Thermage patients are not candidates for liposuction, cryolipolysis or any other noninvasive fat reduction,” he said.

Even as monotherapy, it produces fairly significant results. “After one Eyes by Thermage treatment of the eyelids and brows, millimeter-sized changes make a difference in how patients are perceived. With the 0.25 cm² Eye Tip, you can treat upper and lower eyelids. When I perform Eyes by Thermage, I treat the upper lid, lower lid, periorbital area and brow. Sometimes I’ll just do the brow and periorbital area, in which case the treatment does not require plastic corneal shields. That’s a fantastic 20-minute brow lift in patients who don’t want injectables or surgery.”

Other RF devices require five or six treatments for satisfactory results, he said.
New research in antiaging

Study indicates future possibility of new molecular targets

LISSETTE HILTON | Staff Correspondent

Early research suggests the Na/K-ATPase oxidant amplification loop (NKAL), a feed-forward amplification loop for oxidants, plays a critical role in the aging process and eventual oxidant injury, while a newly developed synthetic peptide appears to attenuate cellular senescence, according to findings published June 26, 2018, in *Scientific Reports*.

Senescence and apoptosis cause the phenotypic progressive age-related decline. Oxidant stress is at the forefront of the aging process, causing injury to cellular proteins and DNA, according to the paper.

“When reactive oxygen species (ROS) accumulation exceeds the detoxifying ability of the cell, the resulting oxidative stress induces damage, senescence and apoptosis,” the authors write.

NKAL, the authors of this study have shown, is a non-specific reactive oxygen receptor. It helps to start a signaling cascade for reactive oxygen species generation. The same group developed the pNaKtide peptide from the N domain of the Na/K-ATPase α1 subunit, which inhibits the Na/K-ATPase feed forward amplification of reactive oxygen species, according to the paper.

“I believe our research has delineated a novel mechanism operant in the aging process within cells and, if validated, presents several molecular targets in the aging process,” says Joseph I. Shapiro, M.D., senior author and dean of the Marshall University Joan C. Edwards School of Medicine. “In particular, we think that the peptide, pNaKtide, that we studied in the paper could have the potential to do this and serve as an ‘anti-aging’ medication. However, we caution the reader that a lot of additional work will be necessary prior to clinical testing of pNaKtide.”

The researchers studied aging mice, feeding the animals a Western diet to stimulate NKAL or pNaKtide to antagonize the NKAL. The Western diet accelerated functional and morphological evidence for aging, whereas pNaKtide attenuated these changes.

They then studied human dermal fibroblasts, which they exposed to different oxidant stressors in vitro. Each of the stressors increased senescence marker expression, cell-injury and apoptosis. The stressors also stimulated NKAL; pNaKtide treatment attenuated cellular senescence. N-Acetyl Cysteine and vitamin E lessened overall oxidant stress to a similar degree as pNaKtide, but pNaKtide protected against senescence more than either antioxidant.

“In particular, pNaKtide appeared to specifically ameliorate nuclear oxidant stress to a greater degree,” the authors write.

Disclosures: Study author Dr. Zijian Xie, Ph.D., discovered the scaffolding function of Na/K-ATPase. The group of authors described NKAL. And pNaKtide was discovered and patented by study authors Drs. Xie and Shapiro.


Thermage for neck is combined with neuromodulator to reduce platysmal banding FROM PAGE 76

Eyes by Thermage is very popular with younger patients.” He also likes Thermage for the neck, often combined with a neuromodulator to reduce platysmal banding.

Thermage treatment starts with placement of a grid, which guides application of the handpiece, to an area such as the face. “Sometimes I don’t even put the grid on because it’s pretty small, and I know where I’ve been.” With the handpiece activated, Dr. Narurkar uses his non-dominant hand to retract skin for even RF distribution in areas such as the jowls.

“I’m just following the squares. You no longer overlap — you do a row of squares, followed by a row of circles.”

After treating one side of a patient’s face during a live demonstration, “you can see this beautiful cheek sweep. She’s got a lift. Her jawline is much more defined, and results get better over time.” Skin tightening develops over the next four to seven months.

Results last one to three years. ◄

Disclosures: Dr. Narurkar is a consultant for Solta.

Reference
When paradoxical adipose hyperplasia strikes

Researchers note incidence may be higher than reported

LISETTE HILTON | Staff Correspondent

In our series, 50% of the treated patients with liposuction required a second treatment for recurrence or persistent bulge.”

Michael E. Kelly, M.D., Miami Plastic Surgery, Miami, Fla., and colleagues

Incidence reported by manufacturer much smaller than incidence reported in new study.

Timing, patience are required for successful treatment of this complication.

There is no current data on the long-term effects of procedures used to treat paradoxical adipose hyperplasia.

Patients who elect to have nonsurgical fat reduction with cryolipolysis are at risk for a complication in which a hardened area of localized fat develops post procedure, leaving patients with a bulge that requires the very treatments they tried to avoid for removal.

Risk of this complication, called paradoxical adipose hyperplasia, might be higher than the one in 4,000 treatment cycles, or 0.025% incidence, reported by the device’s manufacturer, researchers suggest in a new study. Authors of the study, published in the July issue of Plastic and Reconstructive Surgery, report paradoxical adipose hyperplasia’s incidence is 0.72%, or about one in every 138 cryolipolysis treatments.

Plastic surgeons looked retrospectively for all paradoxical adipose hyperplasia patients seen in their practice between May 2013 and May 2016. They identified eight men and three women with paradoxical adipose hyperplasia. All 11 patients were Hispanic.

Surgeons treated patients successfully with liposuction only or, as was the case with one patient, liposuction and abdominoplasty. “In our series, 50% of the treated patients with liposuction required a second treatment for recurrence or persistent bulge,” they write.

The authors report that timing and patience are of the essence for successfully treating paradoxical adipose hyperplasia. They recommend that surgeons wait until the hardened tissue has softened, which takes about six to nine months post cryolipolysis. Physicians who remove the tissue too early risk a less optimal outcome and recurrence, they write.

Patience is required when explaining the problem and offering a solution dealing to these patients, who tend to be upset. When surgeons are attentive and successfully treat patients for paradoxical adipose hyperplasia, chances are good that patients will be satisfied despite the hurdles, according to the study.

Two patients with the complication refused further treatment, even though the treatment costs were covered by the equipment manufacturer, according to an American Society of Plastic Surgeon’s press release on the study.

There is no data looking at the long-term effects of procedures used to treat paradoxical adipose hyperplasia, they write.

Researchers coined the term paradoxical adipose hyperplasia in March 2014, in a case report published in JAMA Dermatology. The authors, at that time, reported paradoxical adipose hyperplasia’s incidence was 0.0051%.

Quick TAKES

References:


Authors shared their experience treating patients with paradoxical adipose hyperplasia and reported results of their retrospective chart review in the July issue of Plastic and Reconstructive Surgery. bit.ly/paradoxicaladiposehyperplasia
Every Patient Deserves an Option with **Superficial Radiation Therapy**.

- **95% Cure Rate** for Non-Melanoma Skin Cancer
- **94% Cure Rate** for Keloids

Contact us to find out how Sensus Healthcare can make your practice even better.

[www.sensushealthcare.com](http://www.sensushealthcare.com)
Combined procedures lead to superior results

WHITNEY J. PALMER | Staff Correspondent

Combination therapies, such as fillers and neuro-modulators, are becoming widespread. If you find yourself offering these paired procedures more often, it’s imperative you know how to complete them in the safest, most efficient ways possible.

According to Arisa Ortiz, M.D., the director of laser and cosmetic dermatology at the University of California San Diego, says that means using combination therapies to address more than just singular issues.

“As we learn how to better improve aesthetics, we’ve realized we need to take a global approach to patients rather than fixing one wrinkle or one aspect to give a more improved outcome,” Dr. Ortiz says. “But, you must do it safely.”

In her presentation, “Combining Fillers & Neuromodulators with Energy-Based Devices” at the 2018 AAD Summer Meeting in Chicago, Dr. Ortiz offered guidance on how best to combine various treatments in ways that benefit patients the most.

Overall, Dr. Ortiz says, correctly combining fillers, neuro-modulators, and energy-based devices can give your patients more satisfying dermatological experience. Additionally, combination treatments can minimize a patient’s healing time because they only come in one day for procedures. Pairing services can also reduce the likelihood patients will endure more invasive treatments, such as face lifts, in the future, she says.

“Combining therapies can give you superior clinical results,” she says. “But, it’s important to know how to do it safely.”

Reference

Arisa Ortiz, MD. “Combining filler/neuromodulators with energy-based devices.” American Academy of Dermatology 2018 Summer Meeting, Chicago, Ill. July 26, 1-4p.m.

Quick Takes

Combination therapies can be used to address more than singular issues.

Correctly combining procedures can minimize healing time and provide a more satisfying patient experience.

1. Separate lasers and neurotoxins by at least one day. Administering them same day can cause swelling and allow the neurotoxin, such as Botox, to diffuse where you don’t want it to. This could result in droopy eyelids or smiles.

2. When administering fillers and lasers same day, complete the filler first. Follow immediately with the laser. Lasers can cause swelling and distort your patient’s anatomy, making it difficult for you to determine how much filler to use.

3. Relax muscles with neurotoxins prior to laser resurfacing. This can improve results, especially if you’re treating lines around the mouth or Crow’s feet around the eyes. Administer the neurotoxin approximately a week before laser resurfacing so the patient’s muscles aren’t contracting while they’re healing from resurfacing.

4. Combine fillers with different tissue-tightening devices, such as microfocused ultrasound or monopolar radiofrequency, to give patients more immediate results. Improvement from tightening devices can take up to six months to appear. Using fillers at the same time can give patients more readily-visible results.
If you’re providing body contouring services to patients, chances are you’re doing it differently than you were a decade ago.

Since 2010, the dermatology industry has seen a paradigm shift in how it treats unwanted fat, and the advancements have changed the way you practice, says Mathew Avram, M.D., director of the Massachusetts General Hospital Dermatology Laser & Cosmetic Center.

“There’s been a revolution in the way we treat fat over the last 10 years. Previously, fat removal really involved invasive surgery. But, now we can do it non-invasively with no cutting, no anesthesia, and typically little, if any, downtime,” said Dr. Avram in a presentation made at the 2018 AAD Summer Meeting in Chicago.

Today, there are many non-invasive technologies available, including cryolipolysis, radio-frequency, laser, ultrasound, and injectables, that remove fat as effectively as invasive procedures, such as liposuction. In fact, according to American Society for Dermatologic Surgery data, for every invasive fat removal procedure, dermatologists complete more than 10 non-invasive ones, totaling roughly six million so far. They target love handles and the lower abdomen, areas under the neck, and the back of the upper arms.

While the non-invasive procedures require multiple treatments and cost more, patients experience less pain, less recovery time, and no side effects, he says. Non-invasive procedure treatment times have improved in recent years, he says, noticing cryolipolysis can be completed in 35 minutes instead of 1 hour, and a 1060-nm diode laser treatment only takes 25 minutes.

These technologies also offer providers positive practice changes. Because they’re non-surgical, a larger dermatologist population can provide them.

“These procedures open a whole ability for people who don’t do liposuction procedures — those who aren’t trained in them — to still provide patients with the ability to remove unwanted fat,” he says. “With these devices, you can address a patient’s major concern with an in-office procedure in no time.”

Although the procedures aren’t invasive, you must still have a good understanding of fat, Avram says. Take the time to understand your patient’s goals and manage their expectations. To achieve greatest success, the majority of patients should already be within 10-15 lbs of their desired weight.

The technologies do have some differences, he says. For example, cryolipolysis can, in rare cases, increase fat volume. This result appears between 2-3 months post-treatment. And, the 1060-nm diode laser can’t be used over tattoos because it can dull pigments.

Even with any limitations to use, Avram says, non-invasive procedures treatment changes are here to stay.

“With these devices, you can address a patient’s major concern with an in-office procedure in no time.”

“This is a new field that continues to change and grow. And, it has no signs of abating over the next few years.”

Mathew Avram, M.D., director, Massachusetts General Hospital Dermatology Laser & Cosmetic Center
Gaps in care filled by APPs

Study raises concerns about procedures performed by this group

BOB KRONEMYER | Staff Correspondent

The number and scope of dermatologic procedures performed by advanced practice professionals is increasing, which suggests a need to report and follow outcomes and support optimal training, writes Myron Zhang, M.D., and colleagues in JAMA Dermatology.

Dr. Zhang and colleagues examined how the scope of skin procedures performed by advanced practice professionals, such as nurse practitioners and physician assistants, has changed over the years. It is clear that nurse practitioners and physician assistants are seeing more patients today, but researchers were curious to know what specific procedures they were conducting.

They found the total number of all dermatologic procedures conducted by advanced practice professionals increased from 2.69 million of 30.7 million in 2012 to 4.54 million of 33.9 million in 2015. The percentage of these procedures performed by advanced practice professionals also rose from 8.8 percent to 13.4 percent during the same time period.

The most common procedure performed by advanced practice professionals in 2015 were destructions of benign neoplasms (3.6 million), followed by biopsies (788,834) and destructions of malignant neoplasms (48,982). The numbers of patch tests, removals of benign and malignant neoplasms, intermediate and complex repairs, flaps, and surgical pathologic specimen examinations also increased each year from 2012 through 2015.

This was a three-year study that analyzed data from the Medicare Provider Utilization and Payment Data that includes outpatient procedures paid by Medicare Part B in the United States.

The authors of the current study, published online July 11, said their results are a catalyst for further study of patient outcomes.

“Advanced practice professionals provide an important service to patients and are valuable members of the patient care team.”

A JAMA Dermatology study shows that advanced practice professionals, such as nurse practitioners and physician assistants, are increasingly performing more procedures once typically conducted by physicians. The removal of benign lesions are among the most common of procedures performed by non-physicians. This photo demonstrates the removal of a benign tumor in a cosmetic salon (©TarasAtamaniv/Shutterstock.com)
RETHINK THE CLINICAL SPACE.

Patient education. Consultation. Procedures. Where will you do all of this?

Midmark can help.

We have reengineered the concept of the dermatology room to combine consultation, counseling and procedures all within a seamlessly efficient, yet intimate environment.

For more information, visit midmark.com/DTSep
The authors raise concerns over limited or non-existent training requirements for advanced practice professionals to perform more complicated cognitive skill-based procedures, such as patch testing and complex skin flaps.

Lindsay Strowd, M.D., FAAD, Wake Forest Baptist Health, North Carolina

References


2018 Expand Your Expertise
CUTTING-EDGE COSMETIC SURGERY TRAINING

CME Workshops & Courses
Perfect your skills through in-person instruction.

August 4–5
Cosmetic Surgery Review Course
Director: E. Antonio Mangubat, MD
Chicago, Illinois

August 25
Facial Cadaver Workshop
Director: Julie Woodward, MD
Human Fresh Tissue Laboratory, Duke South Clinic Building,
Duke University, Durham, North Carolina

September 14–15
Live Observational Workshop: Outpatient Liposuction, Fat Grafting,
and New Lipoabdominoplasty Techniques
Directors: Marco Pelosi II, MD and Marco Pelosi III, MD
Pelosi Medical Center, Bayonne, New Jersey

WebClinics
Covering all the major areas of cosmetic surgery, these one-hour, live webinars offer valuable CME credit and in-depth training for time-starved medical professionals. All take place at 8pm CT.

May 1
Incorporating Bioidentical Hormone Replacement Therapy into Your Cosmetic Surgery Practice
Dima Ali, MD

June 5
Protocols to Safely Perform Medium and Deep Chemical Peels
Desmer Destang, DDS

July 3
Fat Grafting: A New Spin on an Old Favorite
Talon Meningas, DO

August 7
Use of Adipose-Derived Stem Cells and Shockwave for Erectile Dysfunction
Carlos Mercado, MD

September 4
Improving Eyelid and Cheek Junction During Deep Plane Face Lift with Endoscopic-Assisted Canthal Surgery
J. Kevin Duplechain, MD

October 2
Hair Restoration Surgery Isn’t Just Surgery Anymore
Ryan Welter, MD, PhD

November 6
Skin Resurfacing
Suzan Obagi, MD

December 4
Endoscopic Brow Lift
Todd L. Beyer, DO

WEBCLINICS PRICING
MEMBER
PHYSICIANS
$49

NONMEMBER
PHYSICIANS
$99

RESIDENT/ALLIED HEALTH
FREE

*Indicates no CME offered

Find more information on AACS EDUCATION at COSMETICSURGERY.ORG
Technology is your friend

Pennsylvania Dermatology Partners tells its story of technological support and success

ANDREW FRANKEL | Chief Operating Officer, Pennsylvania Dermatology Partners

When Dr. Daniel Shurman, a dermatologist and Mohs surgeon, and I took the leap and started our own dermatology practice in 2012, we decided upfront that we would rely heavily on technology to build our practice. We knew what we wanted — and didn’t want. We came from a practice where Dr. Shurman was one of the more productive practitioners and I was the COO. That practice was an early innovator in the world of electronic healthcare records (EHRs) and they had a home-grown practice management (PM) system, which created some decent efficiencies in the early days of medical practice technology. However, to succeed in our new practice, we knew we would need a more advanced, robust and integrated systems to serve both the dermatology and technology needs of our new patient base in southeastern Pennsylvania.

The decision to invest in technology was the right one for us, even though we started with only Dr. Shurman, one nurse practitioner, a small office staff and me. Technology has helped us to achieve a consistent growth trajectory of about 15% a year, a very nice pace as we have added locations, doctors and occasionally a nature practice. Today, Pennsylvania Dermatology Partners (PDP) has 12 offices, 11 physicians, seven nurse practitioners and physician assistants, a front desk person in each office, and six people in a call center for overflow calls. We are up to 7,800 patient visits per month, aiming for 8,500 per month by the end of the year. Here are the technology-related lessons we learned along the way.

Lesson #1—
Basic Systems Have to Work Together

With so many technology vendors out there, it was a challenge to evaluate them all. You need to look not only at cost, but at the ability of the tools you choose to work together, as well as their ease of deployment and use. As a dermatology practice, we had to have an EHR specific to our specialty, which was the starting point in our technology process.

Next, choosing a PM system was just as important. A practice management system doesn’t have to be specialty-specific, as our management issues are basically the same as those faced by a hospital, a small solo practice or a network group provider. A PM system must be broad and able to do many different things for all the different people working in the practice, not unlike a Swiss army knife. We found one that interfaces well with our dermatology-specific EHR and also accommodates our growth; AdvancedPM from AdvancedMD has industry-standard tools that are easy to leverage, scales effortlessly as we add offices, and helps us tie everything together, be it changing provider schedules or messaging a patient, creating custom claims scrubbing tools, analyzing financial trends, pushing out information to new patients and more. AdvancedMD has proven a facile tool for all of those purposes.
TRAVEL TO TRANSFORM WITH
PASSION TO HEAL™

PROVIDE DERMATOLOGY CARE TO COMMUNITIES IN KENYA AND INDIA.
Leverage your professional expertise and skills by making a difference in the world. Travel on a fully funded ME to WE Trip to rural Kenya or India to help transform health care for thousands of adults and children in our charity partner's communities. In collaboration with ME to WE Trips, the Passion to Heal™ initiative funds the cost of these medical volunteer trips, supported by Valeant Pharmaceuticals NA LLC (VPNA).

INDIA April 14 – 23, 2018 / June 2 – 11, 2018
KENYA April 28 – May 7, 2018 / August 25 – September 3, 2018

APPLY NOW
FOR YOUR FULLY FUNDED TRIP!

PASSIONTOHEAL.COM
“You need to look not only at cost, but at the ability of the tools you choose to work together, as well as their ease of deployment and use.”

Andrew Frankel  Chief Operating Officer, Pennsylvania Dermatology Partners

Lesson #2 – DEALING WITH MACRA AND OTHER CMS REGULATIONS
Over 40% of our patients are Medicare age (65 and older), and so a major part of our business depends on maintaining a great relationship and a state of high compliance with the Centers for Medicare & Medicaid Services (CMS) rules and regulations. AdvancedMD provides a great reporting platform for tracking demographics, flagging the relevant patients and staying ahead of the reporting curve for all government compliance.

The math is very simple. Each year Medicare applies larger and larger penalties to practices who do not comply with their Meaningful Use, PQRS, MACRA and now MIPS reporting requirements. That can add up to a hefty penalty for a practice of our size so we take the responsibility seriously. AdvancedMD helps us a lot in that process.

Lesson #3 – INTERACT WITH PATIENTS ON MULTIPLE PLATFORMS
When we opened in 2012, none of the PM systems we evaluated included online scheduling or reputation management. But as those capabilities became available, we determined that with patients doing more and more online, it made sense for us to add an online scheduling system. We looked at an outside service, for which we would pay a monthly fee, which we used but weren’t keen on adopting long-term. We were pleased to learn that the same vendor, AdvancedMD, had integrated an online scheduling feature which we turned on as part of our patient portal. Appointments now go directly to the doctors only on our site, without sharing our patient demographics with a third party as it happens with outside scheduling services.

While the actual percentage of our patients who schedule appointments online is small, this capability has turned out to be a fantastic addition to the growth of our practice. Patients make appointments outside of office hours, at their convenience, even at 1 o’clock in the morning, and we easily see that we’ve had 183 reviews in the past seven days, 158 of them with five stars. I can also dig in to see what feedback was provided by the patients, and can aggregate reviews by category, such as by office or practitioner. Any negative reviews are flagged so we can reach out and try to do better. Reputation management software helps us do that on a large scale, both easily and elegantly.

The reputation management feature from AdvancedMD allows patients to interface with Google Reviews. We then can push positive reviews out to Facebook (and we hope to other sites like Health Grades, Vitals and Yelp! in the future), an important part of maintaining our reputation and expanding our practice. In addition, by logging into our AdvancedMD dashboard, I can easily see that we’ve had 183 reviews in the past seven days, 158 of them with five stars. I can also dig in to see what feedback was provided by the patients, and can aggregate reviews by category, such as by office or practitioner. Any negative reviews are flagged so we can reach out and try to do better.

Lesson #5 – STAY AHEAD OF THE TECHNOLOGY CURVE
I am exceedingly proud that our practice is growing in a sensible way and, without venture capital funding, has become a real contender in a very competitive environment. We absolutely would not be able to understand and expand our business in this manner without the integrated technology platform around which we’ve built it. But we know we can take nothing for granted, nor can we rest on our successes. The future of medicine is being able to provide the best services to our patients, and to adapt as necessary to do even better on their behalf. Employing the newest technologies will play a major role in ensuring positive outcomes, for our patients and for PDP.

ARTIFICIAL INTELLIGENCE  With constant changes in healthcare and how much patients are responsible to pay for their care, practices should turn to technology for assistance. Read more: bit.ly/healthcareartificialintelligence
THE AESTHETIC ACADEMY
November 17-18, 2018 • Hyatt Aviara • Carlsbad, Greater San Diego Area
www.TheAestheticAcademy.com

Where Medical Aesthetic Trends, Techniques and Technologies Converge

CME Credits Available
Live Demonstrations

Injectables | Marketing | Emerging Procedures and Technologies
World-Class Educational Program Includes:
Advanced Hands-On Injectable Training – Neurotoxin and Dermal Filler Techniques
Certified Aesthetic Consultant Certification – Advanced Techniques for Practice Success
General Education – All About Aesthetics

THE AESTHETIC CHANNEL
the global source for events and media in aesthetic medicine
**Quick Takes**

Of 90,743 claims cited in one study, 70% were abandoned.

The average payout in dermatology is $238,000 which is comparable to the national norm.

Patients tend not to sue “friendly” doctors.

---

**Reducing Risk of a Lawsuit**

- Precise documentation is important. Copying and pasting information in an electronic medical record (EMR) spells trouble and can lead to multiple mistakes. Dr. Wolverton said. Follow-up with patients who cancel or don’t show to make sure they’re up-to-date on needed monitoring for medications, in compliance with medications and more.

- There is no doubt, Dr. Wolverton says, that staying up-to-date on individual states CME requirements can have some value in medical legal risk reduction.

- If served with a notice or complaint, do not try to contact the patient, don’t change your records — either written or electronic.

- Informed consent is a discussion, not just a signature. Dr. Wolverton said. “The communication — not the signature — is the key. The witness signature is commonly misunderstood. It is to say the patient is competent. It’s not saying that they have understood all the risks and benefits.” But common and serious risks need to be discussed.

- Your staff should be organized, hospitable and competent. They should know when to report difficult patient encounters to the physician. And when these encounters do occur, it should be documented in writing.

- Problems or inconsistencies in medical records can make or break a case. Notes should be clear, concise regarding diagnosis and the care plan. If possible, explain why certain diagnoses were excluded.

- The chance of medical errors are high due to potentially incorrect or outdated information. As a rule, be careful with the copy and paste function in EMRs.

---

**Malpractice: Good communication skills can reduce your liability risk**

From Page 1

-frequently today than in previous years.

Researchers writing in the February issue of *JAMA Dermatology* found that fewer medical liability claims were filed between 1991 and 2015 against dermatologists as compared to 27 other specialties.

Most medical malpractice claims are abandoned. Of 90,743 closed malpractice claims that were analyzed in the *JAMA Dermatology* study, only 1.2% were against dermatologists and of those, nearly 70% were abandoned, withdrawn or dismissed. Between 2006 and 2015, trial verdicts favoring dermatology defendants exceeded trial verdicts for patients by a factor of seven.

The average payout in dermatology was $238,000, which is lower than the average $335,000 awarded to other specialties.

Safeguarding against liability comes down to communication, using best practices and following guidelines, said Brandon L. Adler, M.D., an author of the *JAMA Dermatology* study.

“A huge amount of liability revolves around miscommunication and sometimes lack of real in-depth conversations to ensure that everyone is on the same page,” Dr. Adler said.

Patients tend not to sue when they perceive their doctors to be communicative, caring and honest, said Ronald S. Litman, D.O., an anesthesiologist who has presented and published on how the communication skills of physicians can make or break a malpractice claim risk.

Even great doctors who don’t have those skills risk lawsuits, he said.

“I used to work with a pediatric cardiac surgeon who was a brilliant surgeon and pioneered many different procedures to help children, but he had such a bad bedside manner that when complications occurred he shut down and didn’t communicate with parents. He ended up getting sued often because that was the only way parents could really find out the details about what actually happened to their children,” said Dr. Litman, who is medical director at the Institute for Safe Medication Practices, a nonprofit organization devoted to preventing medication errors.

Part of good communications is acknowledging and apologizing when things go wrong. The apology is more to reassure the patient — not to assign blame, Dr. Wolverton said. Most states have apology laws to protect physicians who say they’re sorry, he said.

“The law basically says that if you apologize, that apology can’t be used against you in court, but it doesn’t mean you’re risk-free. If you’re going to apologize about a complication, first check with your lawyer or your malpractice insurance,” Dr. Wolverton said.

“All physicians should familiarize themselves with areas of potential risk and avoid medico-legal pitfalls,” Dr. Wolverton and colleagues wrote in the December 2016 issue of the *American Journal of Clinical Dermatology*. The authors published a two-part series addressing the medical-legal questions that apply to most practitioners.

The risk of a malpractice suit should be put into perspective, Dr. Wolverton said.

“If someone practices with the ongoing fear of something that’s very likely to occur, you take away the joy of medicine. You can’t just focus on risk,” he said. “Good communication, good documentation, good relationships are probably collectively the best malpractice risk prevention.”

References


---

**The National Practitioner Data Bank**

Even when cases settle, the case will be recorded indefinitely on the National Practitioner Data Bank site of the U.S. Department of Health and Human Services. The site records medical malpractice payments and adverse actions against healthcare practitioners and suppliers. It also includes written rebuttals by physicians.
**REGISTER EARLY & SAVE!**

**Discussions in Cosmetic Surgery & Dermatology**

November 28 - December 1, 2018 at The Cosmopolitan of Las Vegas


---

**Practical. Honest. Insightful.**

"This is the best conference I've attended – quick, to the point, high-yield information – it's a great experience.”
- Edward Nadimi, MD

"The dynamic discussions are invaluable. And every session had an exorbitant amount of material to learn from.”
- Jessica Feig, MD

"This is my second year here and I'd have to say it's become my favorite meeting because of the great combination of science, education, straight talk and a lot of fun.”
- Zakia Rahman, MD

"Great talks and great discussion where people can really say how they feel and give real opinions. Really good information and a really good experience.”
- Joely Kaufman, MD

"I will continue to come back every year because it is honest and very fresh – this is one of the most honest meetings that there is.”
- Jill Fitchel, MD

"The conference started on Thursday morning at 8 o'clock and by 8:30 my life had changed. The very first talk was incredibly informative!”
- Candace Spann, MD

---

Course Director: Joel Schlessinger, MD  
*CME credits are subject to change*  
For more information, please contact: Natasha Mohr  •  info@CosmeticSurgeryForum.com  •  402-697-6564
I know there wasn’t a chance that her alleged improvement had anything to do with the steroid injections; rather, it had to do with the power of being seen by a doctor and being cared for.”

— Anna Sarno Ryan, M.D.
IMCAS
INTERNATIONAL MASTER COURSE ON AGING SCIENCE

21st ANNUAL WORLD CONGRESS • JAN 31 to FEB 2, 2019 • PARIS

250 SESSIONS
750 SPEAKERS
10,000 ATTENDEES

CHECK OUT THE PROGRAM
SUBMIT YOUR ABSTRACT AND
REGISTER ON IMCAS.COM

THE LIVE EXPERIENCE
IN DERMATOLOGY, PLASTIC SURGERY AND AESTHETIC SCIENCE

IMCAS ACADEMY
THE LEADING E-LEARNING PLATFORM IN DERMATOLOGY,
PLASTIC SURGERY AND AESTHETIC SCIENCE

GET ACCESS TO
2,500 DEMONSTRATIONS AND PRESENTATIONS

NOW AVAILABLE AS A MOBILE APP!
DOWNLOAD IT NOW
IMCASACADEMY.COM
a ritual exercise performed to alleviate abdominal pain. Children displayed severe scars from stove accidents and they displayed other scars as a result of poorly treated injuries that eventually led to severe scar formation.

A dermatologist in our group saw a boy with a congenital neurological defect — possibly spina bifida. He had ulcerations down to muscle, or further, on the buttocks and the bottom of one foot. His father was so dedicated to helping his son that he paid a local villager to inject an unknown substance into his son on a weekly basis. Thankfully, through the coordinated efforts of many, this boy will be seen at an academic center in a bigger city.

My most memorable patient was an older woman with tremendously itchy circumferential keloids around her breasts. I saw her on our fourth clinic day. What could I possibly offer?

“Nobody cares how much you know until they know how much you care,” Theodore Roosevelt once said. I had little to offer to relieve her suffering. Did we have Kenalog to inject? Yes. Should I use a semi-large bore needle? Yes. Did the Kenalog get into those hard as a rock keloids? No. There were multiple starts and stops, but I could not tunnel the needle through stone. Was it uncomfortable for her? Yes — predictable! I took her behind the curtain and positioned her by the window for natural light exposure. Did I think she would feel any shift in pruritus with injections plus the topical steroid I sent her home with? Absolutely not, but she returned the next day. She walked miles for another dose because she said she felt better, but I was highly suspect. Even now, thinking of this brings tears to my eyes because I know there wasn’t a chance that her alleged improvement had anything to do with the steroid injections; rather, it had to do with the power of being seen by a doctor and being cared for.

We as physicians don’t have to fix to heal. In a field where we are trained to diagnose and fix, what we offer goes far beyond knowledge. As physicians, we fall deeper into a healthcare system that demands we spend more time spinning our wheels on meaningless tasks. We are being robbed of our greatest gift to our patients — our humanity, time and presence.”

Anna Sarro Ryan, M.D.
Come learn from the brightest of minds, and spend time with your colleagues from all over the globe. DASIL is anticipating 1,000 delegates from more than 40 countries at the 7th World Congress. DASIL 2018 will span the spectrum of dermatologic and aesthetic surgery.

**HERE ARE THE PLENARY SPEAKERS FOR DASIL’S 7TH WORLD CONGRESS**

- Tatjana Pavicic, MD, Germany
- Michael H. Gold, MD, United States
- David S. Goldberg, MD, JD, United States
- Claudia Marcal, MD, Brazil
- Cheryl Burgess, MD, United States
- Guillermo Blugerman, MD, Argentina
- Doris M. Hexsel, MD, Brazil
- Rolf Markus Szeimies, MD, Germany
- Joel L. Cohen, MD, United States
- Venkataram N. Mysore, MD, FISHRS, India
- Patrick J. Lulus, MD, United States
- Red Ainsod, MD, United States
- George M. Martin, MD, United States

**CONGRESS WORKSHOPS**

- Basic & Advanced Dermatologic Surgery
- Cutaneous Oncology
- Energy-Based Devices
- Feminine Rejuvenation
- Hair Transplants
- Injectables
- Liposuction
- Microneedling
- Advanced Facial Reconstruction
- Scar Treatments & Scar Prevention
- Plastic Surgery Update
- And more!

For more information or to register visit www.thedasil.org
physicians, we fall deeper into a healthcare system that demands we spend more time spinning our wheels on meaningless tasks as we fall further from ‘the sweet.’ We are being robbed of our greatest gift to our patients — our humanity, time and presence.

**BASIC HEALTH NECESSITIES**
We provided basic healthcare services, such as lessons in oral health. We taught children how to swish and spit a fluoride rinse, which was hysterical as we watched the trepidation on their faces melt away and turn into surprised delight, followed by our cheering. But it was discouraging to see the extent of dental problems that needed attention, and, as far as I knew, access to a dentist was near impossible. I saw several children with tooth pain and sometimes excavated areas within a molar, but I felt helpless in these scenarios.

Basic health education was a big need in the rural areas. WE set up an educational program with stations for children who watched a puppet show about basic hygiene, such as hand washing. By the time they saw us, they had a basic understanding of what to expect in a doctor’s visit.

**CULTURAL IMMERSION**
One of the many wonderful and educational aspects of WE, was its lessons in local culture. We were offered an opportunity to spend a day in the life of a family in their home where we watched the family matriarch cook. We helped her with her chores, such as walking to a well for water, pumping water into jars, walking home with the urns on our heads, feeding livestock, and we helped in making repairs by reinforcing the walls of houses with a mixture of mud and cow dung.

We rode on camels to the local temple where we fed sacred catfish, learned how to tie dye, learned an Indian dance and made samosas. On our final evening, we wore handmaid Indian garb especially made for us, and we participated in an Indian feast, complete with a ceremony that included a procession with music and dance.

**LONG-LASTING IMPACT**
Although the trip to India feels like it was a lifetime ago, there are ways in which its impact has stayed with me. Rarely does a day go by in which I don’t think about drinking water — how easily accessible it is here at home and how we use it without a second thought.

It was enlightening and encouraging to hear about ways in which the government was supporting girls and women. Girls are provided free lunch through 12th grade versus eighth grade for boys. Women are given the same guaranteed 100 days of work with funds directly deposited into bank accounts. One of the many things that the WE program is doing in Rajasthan is establishing WE schools with separate bathrooms for boys and girls. Another is installing smokeless chimney chutes to minimize the retention of smoke from cooking.

Many of my appreciations for this opportunity to practice medicine in India are deeply personal. I am most grateful to WE for this trip, which has reinforced in me a passion for medicine.

What was not lost in India, was the fundamental necessity for care in healthcare.

---

**ABOUT WE**

The WE Charity was founded more than 20 years ago by brothers Craig and Marc Kielburger as a charity designed to support communities in need throughout the world.

Formerly known as Free the Children, Craig Kielburger was only 12 years old when he began the program. It has since grown to become an international force for good. WE has teams in Asia, Africa and Latin America, has provided more than 1 million people with clean water and built 1,000 schools overseas. The organization includes a number of programs, including Passion to Heal — a program that provides dermatology and ophthalmology care to rural communities in Kenya and India where specialized care remains out of reach in rural communities.

“Without expertise in dermatology or ophthalmology, doctors struggle to treat and diagnose skin and eye conditions, which are widespread across many rural communities. A 1999 study found that 32.4% of children screened in rural Kenya suffered from skin disease,” according to the WE website.

Passion to Heal is supported by Valeant Pharmaceuticals. Visit WE at WE.org.
If you love learning and **DERMATOLOGY** we’ve got the perfect meeting for you!

As an accredited leader in continuing education for over 14 years, we invite you to join us at one of our upcoming conferences.

All meetings are designed to provide cutting edge dermatology-focused curriculum combining a great blend of science and clinical medicine taught by our world-class faculty.

**MauiDerm NP+PA Summer**

**JUNE 21-23, 2018**
Broadmoor Hotel • Colorado Springs, CO
Plus Special Pre-Conference Day on June 20, 2018

**MauiDerm NP+PA Fall**

**SEPTEMBER 27-29, 2018**
Hilton Riverside • New Orleans, LA
Plus Special Pre-Conference Day on September 26, 2018

**Maui+Derm FOR DERMATOLOGISTS**

**JANUARY 26-30, 2019**
Grand Wailea • Maui, Hawaii

Visit our website for more information, meeting registration, hotel reservations and transportation arrangements.

IT'S SIMPLE, SAFE & SECURE.

MauiDerm.com
CASTLE ROCK, COLORADO
General Dermatologist Opportunities
Contact Christie Knowles, (904) 509-8537 or crystal.knowles@leavittmgt.com

COLORADO
Mohs Surgeon Opportunities
Contact Christie Knowles, (904) 509-8537 or crystal.knowles@leavittmgt.com

Reach your target audience. Our audience.
Dermatologists and skin care professionals. Contact me today to place your ad.
Joanna Shippoli
Account Manager
440-891-2615
Joanna.Shippoli@ubm.com

We Buy Practices
Monetization of your practice
Locking in your value now
Succession planning
Sell all or part of your practice
Please call Jeff Queen at (866) 488-4100 or email WeBuy@MyDermGroup.com

Call for a Free Consultation
(800) 416-2055
www.TransitionConsultants.com

MOHS SURGEON
MULTIPLE PART TIME OPPORTUNITIES
Enfield, CT 2-3 days/mo
Groton, CT 1-2 days/mo
Sanford, NC 2-3 days/mo
White Plains, MD 6-7 days/mo
Contact Karey, (866) 488-4100 or www.MyDermGroup.com

WOODLAND PARK, COLORADO
Partnership available. Established practice.
Contact Karey, (866) 488-4100 or www.MyDermGroup.com

SONOMA, CALIFORNIA
Great opportunity for FT dermatologist.
Contact Karey, (866) 488-8100 or www.MyDermGroup.com

Arbor Park, Colorado
Partnership available. Established practice.
Contact Karey, (866) 488-8100 or www.MyDermGroup.com

CAREERS

Call for a Free Consultation
(800) 416-2055
www.TransitionConsultants.com
## CAREERS

### CONNECTICUT

**SOUTHbury, CONNECTICUT**  
Partnership available. Established practice.  
Contact Karey, (866) 488-4100 or www.MyDermGroup.com

<table>
<thead>
<tr>
<th>FLORIDA</th>
</tr>
</thead>
</table>
| **PUNTA GORDA/PORT CHARLOTTE, FLORIDA**  
General Dermatologist Opportunities  
Contact Christie Knowles, (904) 509-8537 or crystal.knowles@leavittmg.com |
| **ST. PETE, FLORIDA**  
General Dermatologist Opportunities  
Contact Christie Knowles, (904) 509-8537 or crystal.knowles@leavittmg.com |
| **CAPE CORAL, FLORIDA**  
General Dermatologist Opportunities  
Contact Christie Knowles, (904) 509-8537 or crystal.knowles@leavittmg.com |

### DISTRICT OF COLUMBIA

**WASHINGTON, DC**  
Great opportunity for FT dermatologist.  
Contact Karey, (866) 488-8100 or www.MyDermGroup.com

<table>
<thead>
<tr>
<th>FLORIDA</th>
</tr>
</thead>
</table>
| **BOISE, IDAHO**  
Great opportunity for FT dermatologist.  
Contact Karey, (866) 488-8100 or www.MyDermGroup.com |
| **KALAMAZOO, MICHIGAN**  
General Dermatologist Opportunities  
Contact Christie Knowles, (904) 509-8537 or crystal.knowles@leavittmg.com |
| **GREENVILLE, MISSISSIPPI**  
Great opportunity for FT dermatologist.  
Contact Karey, (866) 488-8100 or www.MyDermGroup.com |

### GEORGIA

**ALBANY, GEORGIA**  
General Dermatologist Opportunities  
Contact Christie Knowles, (904) 509-8537 or crystal.knowles@leavittmg.com

<table>
<thead>
<tr>
<th>FLORIDA</th>
</tr>
</thead>
</table>
| **BOISE, IDAHO**  
Great opportunity for FT dermatologist.  
Contact Karey, (866) 488-8100 or www.MyDermGroup.com |

### IDAHO

**WHITE PLAINS, MARYLAND**  
Partnership available. Established practice.  
Contact Karey, (866) 488-4100 or www.MyDermGroup.com

### MASSACHUSETTS

**BOSTON, MASSACHUSETTS**  
Excellent opportunity for a FT dermatologist to join an established practice.  
Contact Karey, (866) 488-8100 or www.MyDermGroup.com

### MICHIGAN

**LANSING, MICHIGAN**  
General Dermatologist Opportunities  
Contact Christie Knowles, (904) 509-8537 or crystal.knowles@leavittmg.com

### NEVADA

**RENO, NEVADA**  
Associate Opportunity  
Contact Karey, (866) 488-4100 or www.MyDermGroup.com

### NEW JERSEY

**CENTRAL, NEW JERSEY**  
Excellent opportunity for a FT dermatologist to join an established practice.  
Contact Karey, (866) 488-8100 or www.MyDermGroup.com

### CONNECTICUT

**WHITE PLAINS, MARYLAND**  
Partnership available. Established practice.  
Contact Karey, (866) 488-4100 or www.MyDermGroup.com

### New England, New York, and New Jersey

**Narrow your candidate search to the best.**

Place a recruitment ad in *Dermatology Times* — in print or online.

**DermatologyTimes**

Joanna Shippoli  
Account Manager  
440-891-2615  
joanna.shippoli@ubm.com
Dermatology Opportunity in the Beautiful Berkshires—Western Massachusetts

We understand the importance of balancing work with a healthy personal lifestyle.
- Berkshires, a 4-season resort community
- Endless cultural opportunities,
- World renowned music, art, theater, and museums
- Year round recreational activities from skiing to kayaking.
- Excellent public and private schools make this an ideal family location
- Just 2 ½ hours from both Boston and New York City.

Berkshire Medical Center, BHS’s 302-bed community teaching hospital and Trauma Center, is a major teaching affiliate of the University of Massachusetts Medical School. With the latest technology and a system-wide electronic health record, BHS is the region’s leading provider of comprehensive healthcare services.

Interested candidates are invited to contact:
Shelly Sweet, Physician Recruitment Specialist. mswaei@bhs1.org or Apply online at: www.berkshirehealthsystems.org

Pennsylvania

DERMATOLOGIST
Penn State Health Community Medical Group is seeking several BE/BC Dermatologists as we proudly expand Dermatology services in the scenic Lancaster and Berks County areas. This is an exciting opportunity to start your practice in an area with a pre-existing large, system owned referral base. The two practices, once established, will consist of 2 Dermatologists, 1 Advanced Practice Provider and a Mohs Surgeon. Successful candidates will have the opportunity to interact with both patient care and in the area of continuing education with the faculty of Penn State Health Department of Dermatology, a high-quality program with a national reputation for teaching, research and state-of-the-art patient care.

What We’re Offering:
- Competitive salary and benefits package
- Qualified, friendly colleagues in a supportive health network.
- Attractive area to live, work and play
- Interaction with dynamic clinicians in a collaborative environment

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:
Jeffrey J. Miller, MD, MBA
Professor and Chair, Department of Dermatology
Penn State Health Milton S. Hershey Medical Center
c/o Jenna Spangler, DASPR | Physician Recruiter
jspangler2@pennstatehealth.psu.edu

Penn State Health is committed to affirmative action, equal opportunity, and the diversity of its workforce. We welcome and encourage qualified women, minorities, veterans and disabled individuals to apply.
CAREERS

PENNSYLVANIA

ACADEMIC DERMATOLOGISTS

The Pennsylvania State University College of Medicine and the Penn State Health Milton S. Hershey Medical Center, Department of Dermatology, is seeking applicants for the following BE/BC Dermatologist positions. Successful candidates will have the opportunity to join a high quality program with a national reputation for teaching, research and state-of-the-art patient care.

Who We’re Looking For:
- Pediatric Dermatologist
- General Dermatologist
- TeleDerm/General Derm position

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:
Jeffrey J. Miller, MD, MBA
Professor and Chair, Department of Dermatology
Penn State Health Milton S. Hershey Medical Center
c/o Jenna Spangler, DASPIRA | Physician Recruiter
jspangler2@pennstatehealth.psu.edu

Penn State Health is committed to affirmative action, equal opportunity and the diversity of its workforce. Equal Opportunity Employer - Minorities/Women/Protected Veterans/Disabled.

Narrow your candidate search to the best.
Place a recruitment ad in Dermatology Times — in print or online.

Joanna Shippoli
Account Manager | 440-891-2615
joanna.shippoli@ubm.com

DermatologyTimes

Pennsylvania

PHILADELPHIA, PENNSYLVANIA
General Dermatologist Opportunities
Contact Christie Knowles, (904) 509-8537 or crystal.knowles@leavittmg.com

RHODE ISLAND

RHODE ISLAND
General Dermatologist Opportunities
Contact Christie Knowles, (904) 509-8537 or crystal.knowles@leavittmg.com

VIRGINIA

NORFOLK, VIRGINIA
Associate Opportunity
Contact Karey, (866) 488-4100 or www.MyDermGroup.com
INTEGRATED DERMATOLOGY

WYOMING

JACKSON, WYOMING
General Dermatologist/Mohs Surgeon
Contact Christie Knowles, (904) 509-8537 or crystal.knowles@leavittmg.com

VIRGINIA

FAIRFAX, VIRGINIA
Great opportunity for FT dermatologist.
Contact Karey, (866) 488-6100 or www.MyDermGroup.com
INTEGRATED DERMATOLOGY

Repeating an ad ENSURES it will be seen and remembered!
Reach your target audience.

Our audience.

Dermatologists and skin care professionals.
Contact me today to place your ad.

Joanna Shippoli
Account Manager | 440-891-2615
joanna.shippoli@ubm.com

This index is provided as an additional service. The publisher does not assume any liability for errors or omissions.
Content Licensing for Every Marketing Strategy

Marketing solutions fit for:
- Outdoor
- Direct Mail
- Print Advertising
- Tradeshows/POP Displays
- Social Media
- Radio & Television

Logo Licensing  |  Reprints  |  Eprints  |  Plaques

Leverage branded content from DermatologyTimes to create a more powerful and sophisticated statement about your product, service, or company in your next marketing campaign. Contact Wright’s Media to find out more about how we can customize your acknowledgements and recognitions to enhance your marketing strategies.

For more information, call Wright’s Media at 877.652.5295 or visit our website at www.wrightsmedia.com
**new products**

**Revision launches DEJ eye and face reams**

Revision Skincare’s new **DEJ CREAMS** will be available for purchase via authorized skincare professionals nationwide and on RevisionSkincare.com in August.

DEJ eye and face creams’ unique feature is in the pathway technology and prebiotics to promote long-term skin health.

The eye cream addresses the appearance of dark circles and puffiness around the eyes and the upper eyelids to improve the appearance of eyelid hooding, while reducing the appearance of crow’s feet, sagging skin, and crepiness. In clinical trials, patients reported firmer, smoother, and lifted skin around the eyes. Revision says the advanced, all-in-one eye treatment is clinically-proven to improve the visible signs of aging around the eye area including the eyelid as early as four weeks.

DEJ face cream is a skin-renewing moisturizer with a lightweight feel that addresses visible signs of aging, including sagging and thinning skin, crepiness, fine lines and wrinkles, uneven skin tone and redness. It is clinically shown to create the appearance of firmer, more lifted and bright and radiant skin, with results seen in as early as four weeks, Revision says.

FOR MORE INFORMATION: RevisionSkincare.com

**UVBioTek launched POLY LED therapy**

UVBioTek has launched **POLY-GO**, a hand-held LED light therapy device designed to treat acne, wrinkles, hyperpigmentation, under-eye bags, collagen depletion issues, and even pain, swelling, and redness.

POLY Go, like the clinical and spa version POLY, offers the option to change light heads to address several conditions for a variety of clientele needs. It comes with a mobile app “My Poly” which is designed to guide users through the process of treatment.

UVBioTek developed POLY Go to meet the demand for LED home use products. Since 1994, UVBioTek has manufactured clinical and home phototherapy treatment systems for psoriasis, eczema and vitiligo.

FOR MORE INFORMATION: MyPolyLED.com

**Neova’s clinical recovery cream**

In August, **NEOVA SMARTSKIN CARE** announced the September launch of the **NEOVA Clinical Recovery** product line of six products. The products are designed to calm, soothe, hydrate and protect the skin post microdermabrasion, laser resurfacing, chemical peels and laser hair removal treatments. They have been shown to facilitate healing, decrease risk of adverse events from the treatment, aid in optimal skin recovery and reduce downtime.

The products are based on a Copper Peptide Complex derived from more than 20 years of scientific research in cellular regeneration.

Research has shown that copper peptide treatments within two hours of a procedure can reduce redness and inflammation without corticosteroids.

“When skin is damaged, copper is released by the body to come to its aid as the wound healing process is activated. Essentially, copper signals the repair process to begin. Studies document its benefit when used in a wide variety of wounds, including surgical, post-laser, and even burns. Moreover, cellular pathways involved in dermal repair and skin regeneration are disrupted when skin is damaged. This delays healing and may result in excessive inflammation and scarring,” the company stated in a news release.

The Copper Peptide Complex formulas work by calming cross-talk between cellular pathways which, in turn, repairs and restores skin. It enhances the wound healing process and stimulates skin renewal. Copper supports more than a dozen vital healing enzymes of the skin, including those involved in tissue formation, antioxidant defense and cellular respiration.

The six new products with Copper Peptide Complex include:

- **Clinical Recovery Cu3 Gentle Cleanser**. Cream-to-foaming Copper Tri-Peptide skin balancing wash. It helps in maintaining moisture, but when removing oil and environmental contaminants.

- **Clinical Recovery Cu3 Recovery Lotion Comfort Formula** is a mid-weight, recuperative lotion, with Copper Tri-Peptides. It locks in moisture and protects stressed, compromised skin. Copper Tri-Peptides consist of an air and water tight petrolatum base that promotes regeneration while maintaining a moist wound-healing environment, thereby discouraging scabs from forming.

- **Clinical Recovery Cu3 Lip Repair** is an occlusive petrolatum base with Copper Peptide Complex. It seals in moisture and protects against the effects of sun, cold and wind exposure that can damage lips. It provides lip protection both during and after procedures and it can also be used for daily conditioning.

- **Clinical Recovery Cu3 Recovery Spray Rehabilitation Mist** deposits Copper Tri-Peptide droplets on skin to relieve the tightness and dryness that can occur after a procedure. The spray aids in recovery with Retinol and concentrated micronutrients that include bilberry, orange, lemon and green tea leaf extracts.

- **Clinical Recovery Cu3 Transforming Gel Recovery Mask** is a clinical strength hydrating gel designed to calm and renew distressed, sunburned or jet-lagged skin. The calming gel delivers Copper Tri-Peptide while the mask is designed to counteract skin laxity, loss of firmness and skin dehydration.

- **Clinical Recovery Cu3 Tissue Repair Recovery Cream** includes copper tri-peptides and a soothing, occlusive petrolatum base that is designed to promote natural regeneration in a moist wound-healing environment.

FOR MORE INFORMATION: Neova.com

Dermatology Times welcomes unsolicited articles, manuscripts, and home phototherapy treatment systems for psoriasis, eczema and vitiligo.
Malpractice CLAIMS

TOP 10 DERMATOLOGY MEDICAL ERRORS LEADING TO LIABILITY CLAIMS

1. Failure or delay in initial or consultation
2. Improper performance of procedure
3. Medication errors
4. Failure to fully recognize a complication of treatment
5. Cardiac or respiratory arrest
6. Postoperative infection
7. Unhappy with results of plastic surgery
8. Substance not elsewhere classified
9. Injury to a patient or death
10. Malignant melanoma

MINIMIZE LIABILITY RISK

- Establish strong rapport with patients by engaging in patient-centered communication
- Take a thorough history to help avoid misdiagnosis
- Assess for anchoring bias to help avoid misdiagnosis
- Assess for availability bias to help avoid misdiagnosis
- Reconsider differential diagnoses to help avoid misdiagnosis
- Treat plans should be effectively communicated to the patient
- Effectively counsel each patient before performing any intervention
- Obtain additional training for high-risk procedures and create safety guidelines to help prevent errors while performing a procedure
- Disclose medical errors to the affected patient
- Provide appropriate care to address adverse outcomes and maintain a good relationship with the patient and family

TOP 10 ADVERSE OUTCOMES IN DERMATOLOGY LEADING TO LIABILITY CLAIMS

1. Dyschromia
2. Malignant neoplasms of the skin
3. Malignant melanoma
4. Burn of face, head, or neck
5. Emotional distress only
6. Postoperative infection
7. Unhappy with results of plastic surgery
8. Substance not elsewhere classified
9. Cardiac or respiratory arrest
10. Malignant melanoma
Ortho Dermatologics GIVES BACK

By supporting charitable programs that serve providers and patients, we strive to build meaningful connections within the dermatology community.

Camp Discovery
Helping children with chronic skin conditions enjoy a week of fun.

Aspire Higher™
Helping students, including working mothers, to receive a scholarship to pursue higher education.

Passion to Heal®
Sponsoring medical professionals to help children in developing countries.

Connect with us to make a difference. To learn more about these programs, visit ortho-dermatologics.com/philanthropy.
ASPECTS of ACNE SCARRING

EXPLORE THE POSSIBILITIES

Are your patients ready to board? Learn more at ONEXTON.com

ONEXTON is a trademark of Ortho Dermatologics’ affiliated entities.
© All Rights Reserved. ONX.CG359 USA 18
ASPECTS of ACNE SCARRING

Emerging treatments

Why you should be ready to ID depression

Antibiotic alternative benefits women
HOW MANY MORE FACES CAN YOU REACH?

MORE PATIENTS THAN EVER. RETIN-A MICRO 0.06% gives you more treatment options for your patients, with microsphere technology and pump-controlled dosing.¹

INDICATION
RETIN-A MICRO (tretinoin gel) microsphere is indicated for topical application in the treatment of acne vulgaris.

IMPORTANT SAFETY INFORMATION
- The skin of certain individuals may become excessively dry, red, swollen or blistered during the use of RETIN-A MICRO.
- Tretinoin has been reported to cause severe irritation on eczematous skin and should be used with utmost caution in patients with this condition.
- If warranted, patients should temporarily reduce the amount or frequency of application, or discontinue use temporarily or altogether. If a reaction suggesting sensitivity occurs, use should be discontinued.
- Unprotected exposure to sunlight, including sunlamps, should be minimized during the use of RETIN-A MICRO, and patients with sunburn should be advised not to use the product until fully recovered because of heightened susceptibility to sunlight with the use of tretinoin.
- Patients should be encouraged to use a sunscreen with a SPF of 15 or higher and protective clothing over treated areas when exposure cannot be avoided.
- Weather extremes, such as wind or cold, also may be irritating to patients under treatment with tretinoin.
- The most common adverse events are mild to moderate irritation (erythema, peeling, dryness, burning/stinging, or itching of the skin).
- RETIN-A MICRO should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus, and caution should be exercised in prescribing for nursing mothers. Safety and efficacy in patients under 12 have not been established.

To report SUSPECTED ADVERSE REACTIONS, contact Ortho Dermatologics at 1-800-321-4576 or FDA at 1-800-FDA-1088 or visit www.fda.gov/medwatch.

Please see Brief Summary of full Prescribing Information on the following page.

The significance of these spontaneous reports in terms of risk to the fetus is not known. For purposes of comparison of the animal exposure to systemic human exposure, the MRHD applied topically is defined as 1 gram of Retin-A Micro (tretinoin) gel microsphere, 0.1%, applied daily to a 60 kg person, 0.1 mg tretinoin/kg body weight.

Pregnant rats were treated with Retin-A Micro (tretinoin) gel microsphere, 0.1%, at daily dermal doses of 0.5 to 1.0 mg/kg/day tretinoin on gestation days 6-15. Alterations were seen in vertebral and ribs of offspring at 5 to 10 times the MRHD based on the body surface area (BSA) comparison. Pregnant New Zealand White rabbits were treated with Retin-A Micro (tretinoin) Gel microsphere, 0.1%, at daily dermal doses of 0.2, 0.5, and 1.0 mg/kg/day tretinoin on gestation days 7-19. Doses were administered topically for 24 hours a day while wearing Elizabethan collars to prevent ingestion of the drug. Dermatologic incidences of certain alterations, including domed head and hydrocephaly, typical of retinoid-induced fetal malformations in this species, were observed at 0.5 and 1.0 mg/kg/day. Similar malformations were not observed at 0.2 mg/kg/day, 4 times the MRHD based on BSA comparison. Other pregnant rabbits exposed topically for 2 hours per day to 0.5 or 1.0 mg/kg/day tretinoin gel microsphere restrained in stocks to prevent ingestion, did not show any malformations at doses up to 19 times (1.0 mg/kg/day) the MRHD based on BSA comparison, but fetal resorptions were increased at 0.5 mg/kg (10 times the MRHD based on BSA comparison).

Oral tretinoin has been shown to cause malformations in rats, mice, rabbits, hamsters, and nonhuman primates. Tretinoin-induced fetal malformations in Wistar rats when given orally at doses greater than 1 mg/kg/day (10 times the MRHD based on BSA comparison). In the cynomolgus monkey, fetal malformations were reported for doses of 10 mg/kg/day but none were observed at 5 mg/kg/day (65 times the MRHD based on BSA comparison), although increased skeletal variations were observed at all doses. Dose-related increases in embryolethality and abortion also were reported. Similar results have also been reported in pigtail macaques.

In a 91-week dermal study in which CD-1 mice were administered 0.017% and 0.035% formulations of tretinoin, cutaneous squamous cell carcinomas and papillomas in the treatment area were observed in some female mice. These concentrations are near the tretinoin concentration of 0.04% and 0.1% used in clinical trials. A dose-related increase in cutaneous squamous cell carcinomas and papillomas is expected at tretinoin concentrations. The maximum systemic dosages associated with the 0.017% and 0.035% formulations are 0.1 and 0.5 mg/kg/day tretinoin, respectively. These doses are two and four times the MRHD based on BSA comparison.

The biological significance of these findings is not clear because they occurred at doses that exceeded the dermal maximally tolerated dose of tretinoin and because they were within the background natural occurrence rate for these tumors in this strain of mice. There was no evidence of carcinogenic potential when 0.025 mg/kg/day of tretinoin was administered topically to mice (0.1 times the MRHD based on BSA comparison). Studies in hairless albino mice suggest that concurrent exposure to tretinoin may enhance the tumorigenic potential of carcinogenic doses of UVR and UVA light from a solar simulator. This effect has been confirmed in a later study in pigmented mice, and dark pigmentation did not overcome the enhancement of photocarcinogenesis by 0.05% tretinoin. Although the significance of these studies to humans is not clear, patients should minimize exposure to sunlight or artificial ultraviolet irradiation sources (see Warnings and Precautions).

The genotoxic potential of tretinoin was evaluated in the Ames assay and in the in vivo mouse micronucleus assay, both of which were negative. The components of the microspheres have shown potential for genetic toxicity and fetal malformation. EGDM, a component of the excipient acrylates copolymer, was positive for induction of structural chromosomal aberrations in the in vitro chromosomal aberration assay in mammalian cell lines in the absence of metabolic activation, and negative for genetic toxicity in the Ames assay, and in the in vivo mouse micronucleus assay. In oral fertility studies in rats with tretinoin, the no-observed-effect level was 2 mg/kg/day (19 times the MRHD based on BSA comparison).

PREGNANCY/COUNSELING INFORMATION
Advice the patient to read the FDA-approved patient labeling (Patient Information).

Manufactured for:
Valeant Pharmaceuticals North America LLC
Bridgewater, NJ 08807 USA

By:
Valeant Pharmaceuticals International, Inc.
Laval, Quebec H7L 4A8, Canada
Retin-A Micro is a trademark of Valeant Pharmaceuticals International, Inc. or its affiliates.

Microsphere is a registered trademark of AMCO International Corporation. Any other product/brand names are trademarks of the respective owners.

©Valeant Pharmaceuticals North America LLC
Based on 9612500 October 2017 RAM.0025.USA.17
Topical therapy reduces scar formation in acne

COMBINATION GEL MAY OFFER AN ALTERNATIVE TO RETINOID TREATMENT

by Ingrid Torjesen | Staff Correspondent

The topical gel adapalene 0.3%/benzoyl peroxide 2.5% gel (A0.3/BPO2.5) has been found to prevent and reduce atrophic scar formation in acne, according to a 24-week study published in the American Journal of Clinical Dermatology.

Facial scarring is frequent in patients with acne, especially if acne is not treated early and effectively. Atrophic scars, involving loss of tissue, are the most frequent type. Treatment for scarring often involves invasive procedures, such as laser resurfacing, volumizing fillers, dermabrasion, and excisional techniques, such as punch excision, punch elevation and punch replacement, so reducing the occurrence and severity of scars is preferable.

Adapalene 0.3%/benzoyl peroxide 2.5% fixed-dose combination gel (A0.1/BPO2.5 gel) combines a retinoid with benzoyl peroxide, which exhibits potent and rapid bactericidal effect on Cutibacterium (formerly Propionibacterium) acnes. Topical retinoids target multiple aspects of acne pathophysiology, including normalizing infundibular hyperkeratinization and reducing inflammation, and have a unique class action in reducing the formation of acne precursor lesions and limiting the development of new lesions. However, although there is considerable evidence supporting the efficacy of topical retinoid treatments for primary acne lesions, few previous studies have looked at their impact on reducing acne scars, so researchers set out to look at the impact of A0.1/BPO2.5 gel.

The study included 67 patients aged 16–35 years with Fitzpatrick skin phototype I–IV who had moderate-to-severe facial acne, and distribution of inflammatory and non-inflammatory lesions. Atrophic acne scarring on their faces was roughly symmetrical. At the start of the study patients had an average of approximately 40 acne lesions and 12 scars per half face. All patients had an Investigator’s Global Assessment (IGA) score of three or four on both sides of their face, excluding the nose; and ten or more atrophic acne scars greater than 2 mm (for whole face excluding the nose).

The patients, were enrolled at five centers in Canada.
and one in France, and were randomized to apply A0.3/BPO2.5 on half of their face and the vehicle gel on the other half of their face every evening for 24 weeks. They were asked to apply two pea-sized amounts per half face. None of the patients were using systemic therapy. Fifty four (80.6%) of the 67 patients completed the study between May 2016 and November 2017.

The results showed that by week 24, half faces treated with A0.3/BPO2.5 had 3.8 fewer scars than half faces treated with the vehicle gel – a mean of 9.5 scars versus 13.3 respectively. The scar count had fallen by 15.5% for half faces treated with A0.3/BPO2.5 while it had increased by 14.4% for half faces to which the vehicle gel was applied, meaning there was an approximate 30% difference in scar count between the two treatments.

There was also a 16.5% difference between the proportion of half faces treated with A0.3/BPO2.5 and the proportion treated with vehicle deemed clear/ almost clear using Scar Global Assessment (SGA) at 24 weeks; 32.9% of half faces treated with A0.3/BPO2.5 were considered clear/almost clear compared with 16.4% of those treated with vehicle gel (p < 0.01).

Reductions in acne lesions were observed for both gels, but were far greater for A0.3/BPO2.5. The reduction in inflammatory lesions with use of A0.3/BPO2.5 was 86.7% compared with 57.9% for vehicle gel, and for non-inflammatory lesions it was 86.7% for A0.3/ BPO2.5 versus 57.9% for vehicle gel. Global improvement of acne occurred with both gels, but significantly more subjects were IGA clear/ almost clear with A0.3/ BPO2.5 than with vehicle gel at 24 weeks — 64.2% compared with 19.4%, a difference of 45%. Improvement in skin roughness and texture were also greater with the A0.3/BPO2.5 gel.

Reduction in inflammatory lesion counts and percentage IGA clear/almost clear skin at week 12 in this study were very similar to reductions observed in a previous 12-week phase 3 study, the researchers said.

“The progressive incremental increase in efficacy and effect on scars observed with A0.3/BPO2.5 over 24 weeks highlights the importance of a longer duration of treatment. In fact, three months may be sufficient to observe resolution of the primary acne lesions, but the remodeling processes occur slowly, and six months may be required to induce significant stimulation of the dermal fibroblasts and collagen and clinically observe an effect on scars.”

No serious or severe adverse events were reported. Treatment-related adverse events were reported by 20.9% of patients for A0.3/BPO2.5 gel use and 9% for vehicle gel, and the most frequent problem was skin irritation, particularly during the first few weeks. However, by week 24, 44.3% of patients were not bothered at all by side effects from A0.3/BPO2.5 and 77.0% were not bothered by them with vehicle gel. Only two patients dropped out because of adverse events.

The majority of patients (90.1%) said they were satisfied or very satisfied with the A0.3/BPO2.5 treatment compared with 59.0% for vehicle gel.

Most patients included in the study had moderate acne (92.5% IGA 3 at the start), so further studies are needed, especially in patients with severe acne “to confirm these promising results and evaluate the best treatment regimen to further reduce atrophic acne scars”, she said.

REFERENCES


For the 80% of patients treated for acne vulgaris, scarring can be problematic. Atrophic scars are most common, but treatment options are available.

According to research published in the *Journal of Clinical and Aesthetic Dermatology*, including patients in approaches that evaluate scarring types and their desired outcomes, can yield high patient satisfaction.

Ensure that treatment plans include in-depth conversations about patients’ treatment goals, their concerns, and thoughts about protocols, the authors wrote. It’s also critical they understand any possible therapy limitations.

“Expectation management is important in approaching the discussion of treatment options,” they wrote. “Complete resolution of acne scarring is the exception rather than the rule. Patients should be well informed about the potential risks, including post-procedure erythema, infection, poor wound healing, hyperpigmentation, and paradoxically, scarring.”

Recent studies indicate there are new therapies to reduce the risk and impact of acne scarring. Diligently employing these protocols will produce the best effects.

“Therapy should be maintained until resolution of persistent inflammation and control of new lesion emergence,” the authors wrote. “Determining at-risk skin recovers better and acne scars are less obvious.

Additionally, human-derived cells show promise in affecting acne scars. Multipotential mesenchymal stem cells (MSC) from umbilical cord blood and from adipose cells can promote wound healing and are currently being evaluated for safety. ◄

**REFERENCES**

TREATMENT OPTIONS FOR ACNE SCARRING

To be effective, therapeutic protocols should consider multiple aspects of scarring. First, consider any erythema, or skin redness, and then determine if generalized or individual scars are present. Then, focus on the atrophic scars.

After evaluating your patient, consider these treatment options:

1. By using light converted to heat, pulsed dye laser destroys blood vessels near the skin’s surface to reduce redness. Research shows a 585 nm flashlamp-pumped pdl decreases redness and scarring by 68 percent after one or two treatments compared to untreated skin after six weeks. It also induces collagen remodeling, improving scar appearances.

2. Lasers for acne scarring treatment use monochromatic light to deliver heat, stimulating dermal fibroblasts to replace lost collagen and elastin. Lasers fall into two categories: ablative and non-ablative.

3. Traditional ablative lasers are effective in treating scar appearance, but they also cause significant discomfort, and increased risk of dyspigmentation, scarring, and infections with prolonged healing.

4. The traditional 10,600 nm carbon dioxide laser emits infrared light, creating immediate improvement in skin tone, texture, and appearance after one treatment. Clinical tests show a 69 percent improvement after one month and 75 percent after 18 months. Additionally, the traditional 2,940 nm er:yag laser is less aggressive and is more easily absorbed by the water in the skin. It’s comparably to the carbon dioxide laser and shows good results in patients with pitted facial scars and dark skin types — 36 percent excellent improvement and 57 percent good improvement.

5. Non-ablative lasers target water in the skin and deliver photothermal energy without ablatiting the overlying epidermis. Consequently, patients may experience less skin damage and a shorter recovery. For example, the 1,064 nm nd: yag laser prompts collagen remodeling in the papillary and reticular dermis. So far, it’s been shown to be effective and introduce minimal pigment alterations in patients with dark skin types. Atrophic scars improvement ranges from 20–30 percent after eight sessions.

6. New therapies, such as picosecond lasers, deliver shorter duration, lower energy pulses, leading to fewer side effects. One option, picosure® has food & drug administration approval to treat tattoos and pigmented lesions and improves the appearance and texture of atrophic rolling scars.

7. Another treatment option, dermabrasion to remove the epidermis with or without the dermis and significantly define scar edges. It’s effective for well-defined scars with distinct borders and broad-based scars with indistinct borders, but not for icepick or deep boxcar scars.

8. Chemical peels can treat small depressed scars. Medium-depth peels result in moderate clinical improvement of 51-75 percent clearance, but controlling peel depth is difficult.

9. Microneedling skin pricks eventually lead to collagen production, making skin smoother and improving rolling acne scars. It’s also advantageous because it keeps the epidermis intact. Full results appear within 8-12 months. This treatment option also enables the skin to absorb topical agents to improve cosmetic results.

10. Injectable fillers can bolster soft tissue in soft atrophic scars, but they can lead to infection, pain, redness, lumps, swelling, and abscesses. Temporaty fillers last a few months, requiring multiple treatments. Semi-permanent fillers last up to two years, showing significant scar improvement. And, permanent fillers can last several years. However, no evidence exists on scar improvement impact.
Are you equipped to identify depression in your acne patient?

by Whitney J. Palmer | Staff Correspondent

Of all dermatological conditions, acne vulgaris is the most common. While its outward affects are easily noticeable, the internal ones — reduced self-esteem, decreased self-image, and increased anxiety — often go undiagnosed. As a dermatologist, though, you can help reverse those effects.

In the United States, approximately 85 percent of adolescents and two-thirds of adults over age 18 struggle with acne vulgaris. It’s presence, according to a literature review published in the International Journal of Women’s Dermatology, is associated with higher rates of depression, anxiety, social isolation, suicidal ideation, and suicide attempts. While women and individuals with severe acne vulgaris are most commonly affected, it can have significant negative impacts on anyone.

Of the affected group, 70–80 percent use self-prescribed topical treatments, but only between 5–28 percent seek care from a dermatologist. Patients with moderate-to-severe acne vulgaris (approximately 61 percent of them) are more likely to pursue medical intervention. Overall, individuals with AV take an average of 22.2 months to see a professional.

“You can alleviate the stress for patient who come to see you, the study authors wrote. “As dermatologists, we are trained in managing acne. We can provide early and effective treatment that improves the physical and psychological effects,” the authors wrote. “It is up to us to bridge the gap between those suffering from acne and their access to medical treatment.”

Still, be prepared for up to half being unable to follow treatment plans due to financial reasons, the authors wrote.

ASSESSING ACNE VULGARIS
According to the literature review of 13 studies on acne vulgaris and self-esteem from 11 countries, nearly 90 percent of patients report feeling embarrassed by the condition. The earlier acne vulgaris shows up, the younger the age at which a patient will begin to report self-esteem and self-image problems. However, older adults aren’t immune to the societal implications of acne.

Middle school children are among the hardest hit with decreased self-esteem. Not only are they already dealing with changing hormones, but this age group is also prone to finding and latching on to reasons to socially isolate and reject someone. In fact, the authors report, moderate-to-severe acne vulgaris in this age group is linked to higher incidences of bullying and
HOW MANY MORE FACES CAN YOU REACH?

MORE PATIENTS THAN EVER. RETIN-A MICRO 0.06% gives you more treatment options for your patients, with microsphere technology and pump-controlled dosing.¹

INDICATION

RETIN-A MICRO (tretinoin gel) microsphere is indicated for topical application in the treatment of acne vulgaris.

IMPORTANT SAFETY INFORMATION

• The skin of certain individuals may become excessively dry, red, swollen or blistered during the use of RETIN-A MICRO.
• Tretinoin has been reported to cause severe irritation on eczematous skin and should be used with utmost caution in patients with this condition.
• If warranted, patients should temporarily reduce the amount or frequency of application, or discontinue use temporarily or altogether. If a reaction suggesting sensitivity occurs, use should be discontinued.
• Unprotected exposure to sunlight, including sunlamps, should be minimized during the use of RETIN-A MICRO, and patients with sunburn should be advised not to use the product until fully recovered because of heightened susceptibility to sunlight with the use of tretinoin.
• Patients should be encouraged to use a sunscreen with a SPF of 15 or higher and protective clothing over treated areas when exposure cannot be avoided.
• Weather extremes, such as wind or cold, also may be irritating to patients under treatment with tretinoin.
• The most common adverse events are mild to moderate irritation (erythema, peeling, dryness, burning/stinging, or itching of the skin).
• RETIN-A MICRO should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus, and caution should be exercised in prescribing for nursing mothers. Safety and efficacy in patients under 12 have not been established.

To report SUSPECTED ADVERSE REACTIONS, contact Ortho Dermatologics at 1-800-321-4576 or FDA at 1-800-FDA-1088 or visit www.fda.gov/medwatch.

Please see Brief Summary of full Prescribing Information on the following page.
The significance of these spontaneous reports in terms of risk to the fetus is not known. For purposes of comparison of the animal exposure to systemic human exposure, the MRHD applied topically is defined as 1 gram of Retin-A Micro (tretinoin) Gel microsphere, 0.1%, applied daily to a 60 kg person. This is 0.7 mg tretinoin/kg body weight.

Pregnant rats were treated with Retin-A Micro (tretinoin) Gel microsphere, 0.1%, at daily dermal doses of 0.5 to 1.0 mg/kg/day tretinoin on gestation days 6-15. All teratogenicity was observed in the fetal population at these doses. Therefore, no dose-related reduction in the maternal population was observed. No abnormalities were noted on postnatal examination of the offsprings at the end of the study.

Nonclinical Toxicology

Intraperitoneal administration of tretinoin to CD-1 mice at doses up to 0.5 mg/kg/day did not show any malformations at doses up to 19 times the MRHD based on BSA comparison, but fetal resorptions were increased at 0.5 mg/kg/day (10 times the MRHD based on BSA comparison). Oral tretinoin has been shown to cause malformations in rats, mice, rabbits, hamsters, and nonhuman primates. Tretinoin induced fetal malformations in Wistar rats when given orally at doses greater than 1 mg/kg/day (10 times the MRHD based on BSA comparison). In the cynomolgus monkey, fetal malformations were reported for doses of 10 mg/kg/day but none were observed at 5 mg/kg/day (95 times the MRHD based on BSA comparison), although increased skeletal variations were observed at all doses. Dose-related increases in embryolethality and abortion also were reported. Similar results have also been reported in preliminary studies. In oral peri- and postnatal development studies in rats with tretinoin, decreased survival of neonates and growth retardation were observed at doses in excess of 2 mg/kg/day (19 times the MRHD based on BSA comparison).

Nonteratogenic effects on fetuses

Oral tretinoin has been shown to be teratogenic in rats when administered at doses 24 times the MRHD based on BSA comparison. Toxicologic effects have been shown to be teratogenic in rabbits when administered at doses 10 times the MRHD based on BSA comparison.

Nursing Mothers

It is not known whether tretinoin and/or its metabolites are excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when Retin-A Micro is administered to a nursing woman.

Pediatric Use

Safety and effectiveness in children below the age of 12 have not been established.

OVERDOSAGE

Oral ingestion of large amounts of the drug may lead to the same side effects as those associated with excessive oral intake of Vitamin A.

NONCLINICAL TOXICOLOGY

Teratogenicity, Mutagenicity, Impairment of Fertility

Dermal carcinogenicity testing has not been performed with Retin-A Micro (tretinoin) Gel microsphere, 0.1%, 0.08%, 0.06%, or 0.04%. A 91-week dermal study in which CD-1 mice were administered 0.017% and 0.035% formulations of tretinoin, cutaneous squamous cell carcinomas and papillomas in the treatment area were observed in some female mice. These concentrations are near the tretinoin concentration of 0.04% and 0.1% in topical formulations. A dose-related incidence of liver tumors in male mice was observed at those same doses. The maximum systemic doses associated with the administered 0.017% and 0.035% formulations are 0.5 and 1.0 mg/kg/day tretinoin, respectively. These doses are two and four times the MRHD based on BSA comparison.

The biological significance of these findings is not clear because they occurred at doses that exceeded the dermal maximally tolerated dose of tretinoin and because they were within the background natural occurrence rate for these tumors in this strain of mice. There was no evidence of carcinogenic potential when 0.025 mg/kg/day of tretinoin was administered topically to mice (0.1 times the MRHD based on BSA comparison). Studies in hairless albino mice suggested that concurrent exposure to tretinoin may enhance the tumorigenic potential of carcinogenic doses of UVR and UVA light from a solar simulator. This effect has been confirmed in a later study in pigmented mice, and dark pigmentation did not overcome the enhancement of photocarcinogenesis by 0.05% tretinoin. Although the significance of these studies to humans is not clear, patients should not minimize exposure to sunlight or artificial ultraviolet irradiation sources [see Warnings and Precautions].

The genotoxic potential of tretinoin was evaluated in the Ames assay and in the in vivo mouse micronucleus assay, both of which were negative.

The components of the microspheres have shown potential for genetic toxicity and fetal malformation. EGDM/MA, a component of the excipient acrylates copolymer, was positive for induction of structural chromosomal aberrations in the in vitro chromosomal aberration assay in mammalian cells in the absence of metabolic activation, and negative for genetic toxicity in the Ames assay, and in the in vivo mouse micronucleus assay.

In oral fertility studies in rats with tretinoin, the no-observed effect level was 2 mg/kg/day (19 times the MRHD based on BSA comparison).

PARENT COUNSELING INFORMATION

Advise the patient to read the FDA-approved patient labeling (Patient Information).

Manufactured for:

Valeant Pharmaceuticals North America LLC
Bridgeport, NJ 08607 USA

By:

Valeant Pharmaceuticals International, Inc.
Laval, Quebec H7L 4A8, Canada

Retin-A Micro is a trademark of Valeant Pharmaceuticals International, Inc. or its affiliates.

Microsphere is a registered trademark of AMCOL International Corporation. Any other product/brand names are trademarks of the respective owner.

©Valeant Pharmaceuticals North America LLC

Based on 9612500

October 2017

RAM.0025.USA.17
Deprivation, such as verbal and physical aggression, as well as social exclusion.

The authors also report nearly 62 percent of adults over age 18 experience increased embarrassment and greater self-consciousness if they develop acne vulgaris.

WHAT YOU CAN DO
According to the American Academy of Dermatology (AAD), one of the most important steps you can take is strengthening your relationships with primary care providers, encouraging them to refer their acne vulgaris patients to you as early as possible. To see satisfactory results, the AAD recommends these patients seek care in a medical setting.

In many cases, patients perceive their acne vulgaris to be far worse than it is, so you can answer their questions, allay their frustrations and fears, such as being afraid their acne vulgaris is contagious, and establish a therapeutic protocol. At their first appointment, have patients fill out forms that outline their self-care so you know what steps they’re already taking to address their acne vulgaris and where to go from there.

“Because both objective and subjective severity can influence a patient’s self-image, we recommend that dermatologists who prescribe their own acne vulgaris,” the authors wrote. “If they perceive their acne as being more severe than an objective examination suggests, a more aggressive approach in stepping up therapies to help them achieve their goals may be warranted.”

Even individuals with mild acne can benefit from a prescription, the authors wrote, because it not only improves the condition, but it has also been linked to reduced anxiety and depression, as well as augmented self-esteem. Be sure, though, to manage patient expectations about how long the medication will take to work and what differences he or she will be able to see in their skin’s appearance.

In addition, discuss camouflage techniques that can cover their acne vulgaris as a strategy to help reduce how noticeable the condition is.

SUICIDE
Patients suffering from moderate-to-severe acne vulgaris also face a two to three times greater risk of suicidal thoughts, the authors wrote.

While treating patients for these thoughts or suicide attempts is outside your medical purview, the authors did offer guidance on how to identify patients with these struggles. If you encounter patients exhibiting these behaviors, notify their primary care providers:

- Poor eye contact
- Angry or negative verbalization
- Poor self-care
- Poor hygiene
- Compulsive behaviors
- Self-mutilating behaviors

Ultimately, the authors wrote, the goal of treating acne vulgaris isn’t simply improving the skin’s outward appearance. It’s also addressing the emotional and psychological implications the condition can prompt with dermatologists being in a unique position to do so successfully.

“Perhaps most importantly, a dermatologist who prescribes appropriate medical therapy, manages patient expectations, and educates patients on the results and timing will best help meet patients’ medical and psychological needs,” the authors wrote.

Effective treatment improves patients’ self-esteem, and, as dermatologists, we have an armamentarium of treatment options to improve acne vulgaris.”

CITATION

DEPRESSIVE SIGNS TO LOOK FOR IN YOUR ACNE PATIENTS

- Poor eye contact
- Angry or negative verbalization
- Poor self-care
- Poor hygiene
- Compulsive behaviors
- Self-mutilating behaviors
Spironolactone as effective as antibiotics

STUDY FINDS WOMEN WITH ACNE MAY BENEFIT

by Ingrid Torjesen | Staff Correspondent

Dermatologists should consider using the diuretic drug spironolactone to treat acne in women instead of antibiotics, researchers at the University of Pennsylvania School of Medicine have said after their study found it to be similarly effective.¹

They found that rates of prescription switching over a year were similar for women originally prescribed spironolactone and those originally prescribed antibiotics for their acne. Switching prescriptions is a proxy for ineffectiveness, since a change of drug is often the result of treatment failure due to lack of efficacy, side effects, cost, or other factors.

Despite antibiotics being associated with a range of adverse outcomes and efforts to curb their use because of growing antimicrobial resistance, oral antibiotics remain the most common systemic agent prescribed for the treatment of acne in the United States, according to the Centers for Disease Control, and dermatologists are the specialty that prescribes the highest level of antibiotics per provider.

Spironolactone, which blocks the effects of male hormones, meaning it’s not a treatment option for men, is increasingly used to treat women with moderate-to-severe acne, despite not having been approved by the Food and Drug Administration for this indication. However, the clinical evidence to support its use is limited to small studies, so the researchers sought to compare the outcomes for spironolactone and oral tetracycline-class antibiotics among a larger population of women with acne.

They conducted a retrospective analysis of the frequency of switching to a different systemic agent within the first year of therapy among 6,684 women and girls prescribed spironolactone and 31,614 prescribed an oral tetracycline-class antibiotic between 2010-2016.

Their results, published in Journal of Drugs and Dermatology, revealed that 14.4% of women with acne who were started on spironolactone were prescribed a different systemic agent within one year, compared with 13.4% who started on an oral tetracycline-class antibiotic. After adjusting for age, topical retinoid, and oral contraceptive use, the odds ratio for being prescribed a different systemic agent within one year was 1.07 (95% confidence interval [CI] 0.99-1.16) for those prescribed spironolactone when compared with oral tetracycline-class antibiotics.

The researchers concluded that, based on the observation of similar switching between the two groups, spironolactone may have similar clinical effectiveness to that of oral tetracycline-class antibiotics.

Spironolactone could provide a safe and effective alternative to antibiotics for women, the study’s lead author John S. Barbieri, MD, MBA, Dermatology chief resident at Penn, told Dermatology Times.

“Our results highlight that in this population of women being treated for acne, the rate of switching to another treatment was similar among those started on spironolactone and those started on an oral antibiotic for their acne. These results suggest that spironolactone may have similar effectiveness to oral antibiotics for women with acne,” he said. “Guidelines currently recommend oral antibiotics as one of the first-line treatments for moderate to severe acne. However, given the emerging evidence regarding the effectiveness of spironolactone...”
Study: Psychological stress may increase acne severity

by Ingrid Torjesen | Staff Correspondent

Increased stress is strongly correlated with greater acne severity a study of medical students published in Clinical, Cosmetic and Investigational Dermatology has found.

Although it is widely accepted that there is a relationship between stress and acne, few studies have assessed this relationship, so researchers at the medical faculty of King Abdulaziz University in Jeddah, Saudi Arabia looked at the relationship in 144 of the university’s sixth year female medical students, who were aged 22 to 24 years.

Students were asked to complete the Perceived Stress Scale (PSS). This 14-item self-questionnaire is widely used in stress research, and includes some confounding factors in acne severity, such as, menstruation, heat and humidity, sweating, use of makeup and cosmetic products, oily hair products, use of topical steroids, and squeezing pimples.

Once the students had completed the questionnaire they were examined by an intern, who had been trained by a consultant dermatologist, for the presence of acne lesions. Acne severity was graded according to the global acne grading system (GAGS), and the type of acne lesions present (comedones, papules, pustules, and nodules) and their location were noted.

Three students (2.1%) had no acne, 104 students (72.2%) had mild acne, 33 students (22.9%) had moderate acne, and 4 students (2.8%) had severe acne.

Increased stress severity was found to strongly correlated with increased acne severity, and this relationship was statistically significant (r=0.23; p<0.01). Of the eight acne aggravators included in the Perceived Stress Scale questionnaire, only excessive heat and humidity was found to have a statistically significant impact (p<0.05%).

The researchers said that heat and humidity may make it more favourable for Propionibacterium acnes to colonize the ductal hyperplasia.

While the study showed that there is an association between acne and stress levels, it did not prove a causative role for stress, commented Aryan Maleki, a medical student at Barts and The London School of Medicine and Dentistry, London, UK.

“Acne is known to negatively affect quality of life and mood, so it is possible acne can lead to stress and not vice versa, he said. One way to establish a stronger causal relationship would be by evaluating whether stress-reduction techniques can significantly reduce acne severity.

“It would also aid in distinguishing whether the stress leading to acne originates from extrinsic factors or whether it is due to an individual’s ‘intrinsic’ predisposition to produce stress responses,” he said.

Shadi Zari, from the Faculty of Medicine at the University of Jeddah, in Saudi Arabia said that a number of mechanisms have been proposed mechanisms for how stress could aggravate acne.

In adult women with acne, chronic stress increases the secretion of adrenal androgens and results in sebaceous hyperplasia.

Activation of the hypothalamic–pituitary–adrenal stress...
**ACNE SCARRING**

"GUIDELINES CURRENTLY RECOMMEND ORAL ANTIBIOTICS AS ONE OF THE FIRST-LINE TREATMENTS FOR MODERATE TO SEVERE ACNE. HOWEVER, GIVEN THE EMERGING EVIDENCE REGARDING THE EFFECTIVENESS OF SPIRONOLACTONE COUPLED WITH THE POTENTIAL RISKS OF ANTIBIOTIC RESISTANCE AND OTHER COMPLICATIONS ASSOCIATED WITH ANTIBIOTIC USE, SPIRONOLACTONE SHOULD BE DISCUSSED AS AN ALTERNATIVE OPTION FOR WOMEN WITH ACNE."

Barbieri JS, et al.
*Journal of Drugs and Dermatology*

**Spiroloactone CONTINUED FROM PAGE 12**

spironolactone coupled with the potential risks of antibiotic resistance and other complications associated with antibiotic use, spironolactone should be discussed as an alternative option for women with acne."

In addition to the importance of antibiotic stewardship, long-term oral antibiotic use may be associated with lupus, inflammatory bowel disease, and even colon and breast cancer. Spironolactone is generally well tolerated, with the most common side effect being irregular menstrual periods, which typically improve by using a lower dose or starting an oral contraceptive pill. However, it should be prescribed with caution to those with a history of kidney, heart, or liver disease and not taken by women who are pregnant.

Despite expert opinion supporting the use of spironolactone for the treatment of acne in women, more clinical evidence on its safety and efficacy is needed, Barbieri acknowledged. “Ultimately, there would be significant benefit from a large clinical trial comparing spironolactone to oral antibiotics to provide definitive evidence regarding the safety and efficacy of spironolactone in the treatment of acne,” he said.

“If future studies continue to demonstrate the effectiveness and safety of spironolactone, then potentially it should replace oral antibiotics as the most common treatment of women with moderate to severe acne.”

**REFERENCES**


**Stress CONTINUED FROM PAGE 13**

(HPA) axis is the main adaptive response to systemic stress. In response to emotional stress, the HPA axis activates increased levels of cortisol release.

Corticotropin-releasing hormone (CRH) is the most proximal element of the HPA axis. CRH acts as a central coordinator for neuroendocrine and behavioural responses to stress. CRH stimulates sebaceous gland lipid production and steroidogenesis, which contributes to acne.

“Studies have also shown an increase of CRH expression in the sebaceous glands of acne-involved skin, compared to a low expression in normal skin. This upregulation of CRH expression in acne-involved skin may influence the inflammatory processes that lead to stress-induced acne lesions,” Zari said. “CRH also induces cytokines IL-6 and IL-11 production in keratinocytes, contributing to inflammation, which is regarded as a key component in the pathogenesis of acne.”

Furthermore, peripheral nerves release the neuropeptide substance P or vasointestinal peptide in response to stress. Substance P stimulates the proliferation and differentiation of sebaceous glands and upregulates lipid synthesis in sebaceous cells.

For people with acne, psychological stress could delay wound healing, which could affect the repair of acne lesions, Zari added.

**REFERENCES**

BRIEF SUMMARY OF FULL PRESCRIBING INFORMATION

This Brief Summary does not include all the information needed to use ONEXTON Gel safely and effectively. See full prescribing information for ONEXTON Gel.

ONEXTON® (clindamycin phosphate and benzoyl peroxide) Gel, 1.2%/3.75%, for topical use

Initial U.S. Approval: 2000

CONTRAINDICATIONS

Hypersensitivity

ONEXTON Gel is contraindicated in those individuals who have shown hypersensitivity to clindamycin, benzoyl peroxide, any components of the formulation, or lincomycin. Anaphylaxis, as well as allergic reactions leading to hospitalization, has been reported in postmarketing use with ONEXTON Gel [see Adverse Reactions].

Colitis/Enteritis

ONEXTON Gel is contraindicated in patients with a history of regional enteritis, ulcerative colitis, or antibiotic-associated colitis [see Warnings and Precautions].

WARNINGS AND PRECAUTIONS

Colitis

Systemic absorption of clindamycin has been demonstrated following topical use of clindamycin. Diarrhea, bloody diarrhea, and colitis (including pseudomembranous colitis) have been reported with the use of topical and systemic clindamycin. If significant diarrhea occurs, ONEXTON Gel should be discontinued.

Severe colitis has occurred following oral and parenteral administration of clindamycin with an onset of up to several weeks following cessation of therapy. Antiperistaltic agents such as opiates and diphenoxylate with atropine may prolong and/or worsen severe colitis. Severe colitis may result in death.

Studies indicate toxie(s) produced by Clostridia is one primary cause of antibiotic-associated colitis. The colitis is usually characterized by severe persistent diarrhea and severe abdominal cramps and may be associated with the passage of blood and mucus. Stool cultures for Clostridium difficile and stool assay for C. difficile toxin may be helpful diagnostically.

Ultraviolet Light and Environmental Exposure

Minimize sun exposure (including use of tanning beds or sun lamps) following drug application [see Nonclinical Toxicology].

ADVERSE REACTIONS

The following adverse reaction is described in more detail in the Warnings and Precautions section of the label:

Colitis [see Warnings and Precautions].

Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in clinical trials of a drug cannot be directly compared to adverse rates observed in the clinical trials of another drug and may not reflect the rates observed in clinical practice.

These adverse reactions occurred in less than 0.5% of subjects treated with ONEXTON Gel: burning sensation (0.4%), contact dermatitis (0.4%), pruritus (0.4%), and rash (0.4%). During the clinical trial, subjects were assessed for local cutaneous signs and symptoms of erythema, scaling, itching, burning and stinging. Most local skin reactions either were the same as baseline or increased and peaked around week 4 and were near or improved from baseline levels by week 12. The percentage of subjects that had symptoms present before treatment (at baseline), during treatment, and the percent with symptoms present at week 12 are shown in Table 1.

Table 1: Local Skin Reactions - Percent of Subjects with Symptoms Present. Results from the Phase 3 Trial of ONEXTON Gel 1.2%/3.75% (N = 243)

Before Treatment (Baseline) | Maximum During Treatment | End of Treatment (Week 12)
--- | --- | ---
Dermatitis | Mild | Moderate | Severe | Mild | Moderate | Severe | Mild | Moderate | Severe
Erythema | 20 | 6 | 0 | 28 | 5 | <1 | 15 | 2 | 0
Scaling | 10 | 1 | 0 | 19 | 3 | <1 | 10 | <1 | 0
Itching | 14 | 3 | <1 | 15 | 3 | 0 | 7 | 2 | 0
Burning | 5 | <1 | 0 | 7 | 1 | <1 | 3 | <1 | 0
Stinging | 5 | <1 | 0 | 7 | 0 | <1 | 3 | 0 | <1

*Mod. = Moderate

Postmarketing Experience

Because postmarketing adverse reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

Anaphylaxis, as well as allergic reactions leading to hospitalizations, has been reported in postmarketing use of products containing clindamycin phosphate/benzoyl peroxide.

DRUG INTERACTIONS

Erythromycin

Avoid using ONEXTON Gel in combination with topical or oral erythromycin-containing products due to its clindamycin component. In vitro studies have shown antagonism between erythromycin and clindamycin. The clinical significance of this in vivo antagonism is not known.

Concomitant Topical Medications

Concomitant topical acne therapy should be used with caution since a possible cumulative irritant effect may occur, especially with the use of peeling, desquamating, or abrasive agents. If irritant or dermatitis occurs, reduce frequency of application or temporarily interrupt treatment and resume once the irritation subsides. Treatment should be discontinued if the irritation persists.

Neuromuscular Blocking Agents

Clindamycin has been shown to have neuromuscular blocking properties that may enhance the action of other neuromuscular blocking agents. ONEXTON Gel should be used with caution in patients receiving such agents.

USE IN SPECIFIC POPULATIONS

Pregnancy

Pregnancy Category C.

There are no adequate and well-controlled studies in pregnant women treated with ONEXTON Gel. ONEXTON Gel should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Animal reproductive/developmental toxicity studies have not been conducted with ONEXTON Gel or benzoyl peroxide. Developmental toxicity studies of clindamycin performed in rats and mice using oral doses of up to 600 mg/kg/day (240 and 120 times amount of clindamycin in the highest recommended adult human dose based on mg/m², respectively) or subcutaneous doses of up to 200 mg/kg/day (80 and 40 times the amount of clindamycin in the highest recommended adult human dose based on mg/m², respectively) revealed no evidence of teratogenicity.

Nursing Mothers

It is not known whether clindamycin is excreted in human milk after topical application of ONEXTON Gel. However, orally and parenterally administered clindamycin has been reported to appear in breast milk. Because of the potential for serious adverse reactions in nursing infants, a decision should be made whether to use ONEXTON Gel while nursing, taking into account the importance of the drug to the mother.

Pediatric Use

Safety and effectiveness of ONEXTON Gel in pediatric patients under the age of 12 have not been evaluated.

Geriatric Use

Clinical trials of ONEXTON Gel did not include sufficient numbers of subjects aged 65 and older to determine whether they respond differently from younger subjects.

NONCLINICAL TOXICOLOGY

Carcinogenesis, Mutagenesis, Impairment of Fertility

Carcinogenicity, mutagenicity and impairment of fertility testing of ONEXTON Gel have not been performed.

Benzoyl peroxide has been shown to be a tumor promoter and progression agent in a number of animal studies. Benzoyl peroxide in acetone at doses of 5 and 10 mg administered topically twice per week for 20 weeks induced skin tumors in transgenic Tg.AC mice. The clinical significance of this is unknown.

Carcinogenicity studies have been conducted with a gel formulation containing 1% clindamycin and 5% benzoyl peroxide. In a 2-year dermal carcinogenicity study in mice, treatment with the gel formulation at doses of 900, 2700, and 15000 mg/kg/day (1.8, 5.4, and 30 times amount of clindamycin and 2.4, 7.2, and 40 times amount of benzoyl peroxide in the highest recommended adult human dose of 2.5 g ONEXTON Gel based on mg/m², respectively) did not cause any increase in tumors. However, topical treatment with a different gel formulation containing 1% clindamycin and 5% benzoyl peroxide at doses of 100, 300, and 2000 mg/kg/day caused a dose-dependent increase in the incidence of keratoacanthoma at the treated skin site of male rats in a 2-year dermal carcinogenicity study in rats. In an oral (gavage) carcinogenicity study in rats, treatment with the gel formulation at doses of 300, 900 and 3000 mg/kg/day (1.2, 3.6, and 12 times amount of clindamycin and 1.6, 4.8, and 16 times amount of benzoyl peroxide in the highest recommended adult human dose of 2.5 g ONEXTON Gel based on mg/m², respectively) for up to 97 weeks did not cause any increase in tumors. In a 52-week dermal photocarcinogenicity study in hairless mice, (40 weeks of treatment followed by 12 weeks of observation), the median time to onset of skin tumor formation decreased and the number of tumors per mouse increased relative to controls following chronic concurrent topical administration of the higher concentration benzoyl peroxide formulation (5000 and 10000 mg/kg/day, 5 days/week) and exposure to ultraviolet radiation.

Clindamycin phosphate was not genotoxic in the human lymphocyte chromosome aberration assay. Benzoyl peroxide has been found to cause DNA strand breaks in a variety of mammalian cell types, to be mutagenic in S. typhimurium tests by some but not all investigators, and to cause sister chromatid exchanges in Chinese hamster ovary cells.

Fertility studies have not been performed with ONEXTON Gel or benzoyl peroxide, but fertility and mating ability have been studied with clindamycin. Fertility studies in rats treated orally with up to 300 mg/kg/day of clindamycin (approximately 120 times the amount of clindamycin in the highest recommended adult human dose of 2.5 g ONEXTON Gel, based on mg/m²) revealed no effects on fertility or mating ability.

PATIENT COUNSELING INFORMATION

See FDA-approved patient labeling (Patient Information).

Manufactured for:

Valeant Pharmaceuticals North America LLC
Bridgewater, NJ 08807 USA

By:

Valeant Pharmaceuticals International, Inc.
Laval, Quebec H7L 4A8, Canada
U.S. Patent 8,288,434

ONEXTON is a trademark of Valeant Pharmaceuticals International, Inc. or its affiliates.

©Valeant Pharmaceuticals North America LLC
Rev 04/2018
9432763
OIN.0081.USA.18
ALL ABOARD ONEXTON GEL

Efficacy and tolerability matter when it comes to treating acne. In the pivotal trial, ONEXTON GEL was shown to treat both inflammatory and noninflammatory acne, and no patients discontinued due to an adverse event.1,2

INDICATION
ONEXTON (clindamycin phosphate and benzoyl peroxide) Gel, 1.2%/3.75% is indicated for the topical treatment of acne vulgaris in patients 12 years of age or older.

IMPORTANT SAFETY INFORMATION
• ONEXTON Gel is contraindicated in patients with a known hypersensitivity to clindamycin, benzoyl peroxide, any component of the formulation, or lincomycin.
• ONEXTON Gel is contraindicated in patients with a history of regional enteritis, ulcerative colitis, or antibiotic-associated colitis.
• Diarrhea, bloody diarrhea, and colitis (including pseudomembranous colitis) have been reported with the use of topical and systemic clindamycin. ONEXTON Gel should be discontinued if significant diarrhea occurs.
• Oral and parenterally administered clindamycin has been associated with severe colitis, which may result in death.
• Anaphylaxis, as well as other allergic reactions leading to hospitalizations, has been reported in postmarketing use of products containing clindamycin/benzoyl peroxide. If a patient develops symptoms of an allergic reaction such as swelling and shortness of breath, they should be instructed to discontinue use and contact a physician immediately.
• The most common local adverse reactions experienced by patients in clinical trials were mild and moderate erythema, scaling, itching, burning and stinging.

• ONEXTON Gel should not be used in combination with erythromycin-containing products because of its clindamycin component.
• ONEXTON Gel should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus. A decision should be made whether to use ONEXTON Gel while nursing, taking into account the importance of the drug to the mother.
• Patients should be advised to avoid contact with the eyes or mucous membranes.
• Patients should minimize exposure to natural and avoid artificial sunlight (tanning beds or UVA/UVB treatment) while using ONEXTON Gel. To minimize exposure to sunlight, protective clothing should be worn and a sunscreen with SPF 15 or higher should be used.

To report SUSPECTED ADVERSE REACTIONS, contact Ortho Dermatologics at 1-800-321-4526 or FDA at 1-888-FDA-1088 or visit www.fda.gov/medwatch.

Please see Brief Summary of full Prescribing Information on the following page.


LEARN MORE AT ONEXTON.COM

ONEXTON is a trademark of Ortho Dermatologics’ affiliated entities. © All Rights Reserved. ONX.0037/USA.18

ONEXTON
(clindamycin phosphate and benzoyl peroxide)
Gel, 1.2%/3.75%