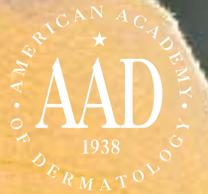


DERMATOLOGY

a patient's guide to healthy skin, hair & nails

insights

Volume 3, Number 2



A Closer Look At Aging Skin & Cosmetic Dermatology

Cosmetic procedure advances

Botulinum toxin
— a shot at wrinkles

Cosmeceuticals

Mole removal

Hair removal
Smoking and skin

Passport to health

Avoiding tropical and foreign diseases

Word of mouth

Common lip inflammations

You're so veined...

Latest treatments for varicose and spider veins

Zap!

The lowdown on lasers



PLUS:

Michelle Charlesworth
ABC News anchor's battle
with skin cancer

Compliments of the American Academy of Dermatology and:

A MESSAGE FROM THE AAD



Our Skin Changes As We Do

Skin is the largest organ of the body and we are continually renewing it our entire lives. Our skin provides our body with its front line of protection. Its tough, elastic, flexible, and waterproof covering helps protect other organs and body parts from heat, cold, sunlight and germs. As such, we have to treat our skin as we would any other vital organ, with care and vigilance. Although our skin sheds and new skin forms in its place, it undergoes many complex changes from birth until death.

This issue of *Dermatology Insights* will take you through the transitions that your skin experiences throughout life and look at the dermatological methods now available to combat some of the more undesirable changes, such as unwanted wrinkles, moles, and other skin imperfections, as well as address some of the dangerously adverse skin changes that can affect your health, like melanomas.

Last year, more than 7.4 million people had cosmetic surgical procedures. New methods, many of them less intrusive than ever before, have increased the options for improving imperfections in the skin and are reported on in this issue. One of the most widely-reported processes in the past year has been on botulinum toxin injections to control wrinkles. Recent FDA approval of the drug for this purpose has made it more popular than ever. Read about the FDA's approval and how the process is conducted through a first-hand *Patient Perspective* on botulinum toxin injections.

The plight of *WABC* New York anchorwoman Michelle Charlesworth in this issue presents a cautionary tale for men and women of all ages and all skin types. Charlesworth was blessed with good fortune — her skin cancer odyssey ended on a happy note. But her story underscores the fact that everyone must be attentive to skin care year-round and pay attention to any unusual marks on their body.

More information about your skin, hair and nails can be found in the Patient Information section of the AAD Web site, www.aad.org.

Fred F. Castrow II, M.D.
President, American Academy of Dermatology, 2002

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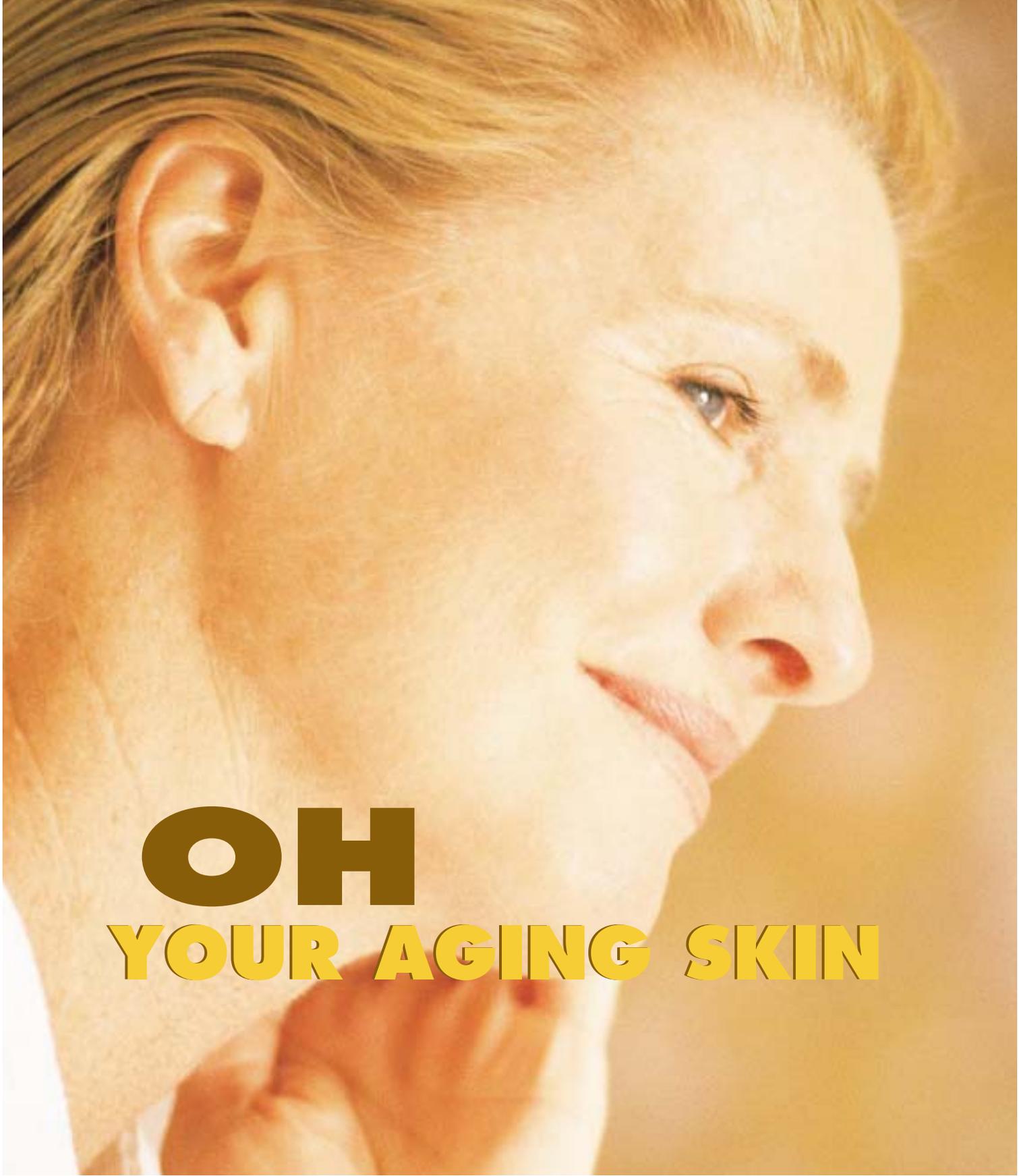
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The American Academy of Dermatology is the largest and most representative of all dermatologic associations. The Academy is committed to advancing the science and art of medicine and surgery related to the skin; advocating quality dermatological care for everyone, education, and research in dermatology; supporting and enhancing patient care, and promoting lifelong healthy skin, hair and nails.

A CLOSER LOOK AT: AGING SKIN &



OH
YOUR AGING SKIN

& COSMETIC DERMATOLOGY

Touch a baby's face and you'll notice the skin feels soft, like a peach. Doctors say that babies' skin is rich with elastic fibers and collagen, the pores are small and there are few if any irregularities in color and texture.

A baby's skin is yet unmarred by the factors that cause what society deems the "unsightly" signs of aging, such as wrinkles, lines, discolorations, loss of facial fat, and thinning skin.

While the aging of skin is an unavoidable fact of life, one largely avoidable factor in many of the signs of skin aging is sun damage, which is blamed for about 90 to 95 percent of wrinkles and nearly 100 percent of color, or pigmentary, changes in the skin. Other signs, however, such as loss of facial fat and thinning skin are a normal part of aging and unavoidable.

A CHILD'S SKIN

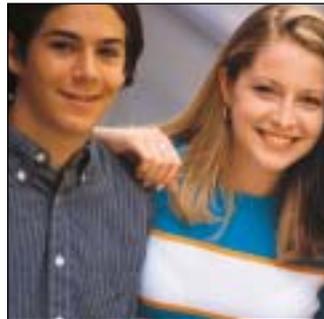
Skin aging can be seen as early as the first year of life, according to Tina Alster, M.D., a board certified dermatologist and clinical professor of dermatology at Georgetown University School of Medicine, Washington, D.C. The first sign of sun damage is freckling, she explained. "No one is born with freckles, it is sun exposure that gives you freckles," Dr. Alster said.

Early sun exposure changes the skin in other ways, too, according to Richard G. Glogau, M.D., a board certified dermatologist and clinical professor of dermatology at the University of California, San Francisco. "If you look at the difference of what I would call 'radiance and reflectance' quality of skin from a newborn to a child who is about nine, there is a significant difference in terms of loss of reflectance quality," Dr. Glogau said. "And that's almost all due to photo (sun) damage."



TEEN SCENE

As children reach puberty, skin and hair changes related to the increased production of hormones begin to take place. "When puberty occurs, you get changes in the texture and growth of hair, especially if you are a male or female with a genetic tendency toward hair loss," Dr. Glogau explained. "You develop



underarm and pubic hair and experience changes in the secretion of glands in the underarms, which give you an odor. If you're male, you begin to get thickening of the hair around the beard area."

Pre-teens and teens who go through significant growth spurts might get stretch marks, that dermatologists say sometimes respond to tretinoin and other topical agents. The teenage years are also when people first start experiencing dandruff. According to Dr. Glogau, over-the-counter products are usually effective treatments for most teens and adults with dandruff.

Perhaps most disturbing to many teens is the acne that comes with the increased activity of the sebaceous glands. Dermatologists have an arsenal of treatments for acne, depending on its severity. According to Dr. Alster, acne treatments range from prescription and over-the-counter topical antibiotics and benzoyl peroxide, to prescription agents with retinoic acid, oral antibiotics and a drug called isotretinoin for the most severe cases (see related story, page 17). "Typically acne that is

cystic in nature warrants some sort of oral treatment," Dr. Alster said.

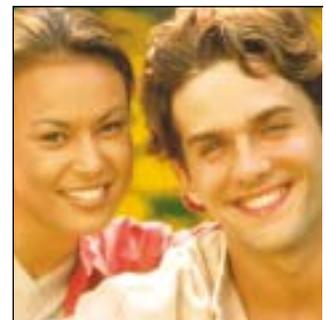
20s AND 30s

Men and women begin to see the "unsightly" damage caused by sun exposure in their 20s and 30s, such as wrinkling and blotchiness, according to board certified dermatologist Patricia K. Farris, M.D., a clinical assistant professor in the department of dermatology at Tulane University, New Orleans.

"As skin ages, there are a number of things that happen to it that contribute to the aging appearance. That's why there isn't one magic cure that can fix aging skin. It's multifactorial, meaning there is more than one thing going on," Dr. Farris explained. "As you get older, depending on the level of sun exposure you've experienced, there are various things that can happen. The breakdown of collagen is one, and that may be exacerbated by sun exposure. You also have the factor of gravity and loss of fat."

According to Dr. Farris, "even if you lived underground and were not ever in the sun, there would be a certain amount of collagen that would break down and a certain amount of fat that would be lost with age. So there's no way you can stop the process completely," she said.

Pregnancy can cause women's leg veins to pop out more and skin to become more sun-sensitive and prone to the brown blotchiness of a condition called melasma. When melasma does not disappear on its own, bleaching agents and some chemical



see Aging Skin & Cosmetic Dermatology page 6

peels can help to even the skin tone, according to Dr. Alster.

Women are subject to a form of adult acne called perioral dermatitis, which, according to Dr. Glogau is probably an estrogen dependent form of acne related to birth control pill use. "It looks like acne but tends to cluster around the mouth and chin," he said. "Treatment is the same as for acne. The problem is that it tends to be very easily irritated so we shy away from treatments that dry the skin."

40s AND 50s

The skin thins during the 40s and 50s. Collagen breaks down in the outer and middle skin layers and the thinner skin loses its elasticity. People — especially those who have spent a lot of time in the



sun — see more age spots, and facial and leg spider veins, called telangiectasias. Rosacea, redness around the nose and cheeks, often accompanied by acne, is also common in the middle years.

According to Dr. Alster, the best way to treat the telangiectasia is with lasers. She said that while topical creams can help to clear away other skin imperfections, such as acne from rosacea, they do not address the redness of the skin.

Menopause often causes moisture content and pigmentation changes in women's skin, which becomes more sensitive at this time, according to Dr. Glogau. Many women find that moisturizers help with the dryness. While men do not go through the same skin changes as women experience during menopause, many do notice that their beards become coarser.

60s AND 70s

The 60s and 70s bring more facial sagging, sun spots and telangiectasias. According to Dr. Alster, many notice skin blotchiness and spider veins on the neck and chest. This condition, poikiloderma, is a result of sun damage, she said. "Chemical peels and topical bleaching agents help with the pigmentation problems and laser and light treatments, including pulsed light lasers, reduce the redness," Dr. Alster said.

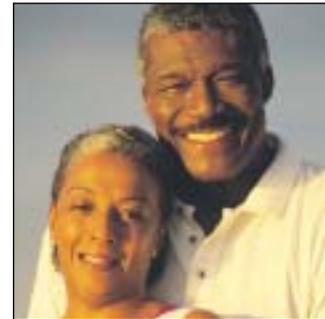
By the sixth and seventh decade of life,

the hair and nails become more brittle. To combat this, Dr. Alster recommends limiting over-aggressive manicures and eating gelatin products. A healthy balanced diet can help thinning, brittle hair. But people should first rule out an under-active thyroid, which also can cause brittle hair, she said.

It is clear that sun exposure is at the root of skin changes throughout life. According to Dr. Glogau, the ultraviolet light from the sun damages the skin's DNA — or building blocks. "There is some cellular mechanism that exists which can repair that damage, but it becomes less efficient with time," he said. "Over the years, some of that DNA damage is not repaired and the cells begin to mutate and grow in an abnormal way. Eventually they might become cancerous," he said.

One disturbing fact is that while the population is now living longer, people appear to be aging sooner. "Sociologically, we're seeing wrinkling at earlier and earlier ages. Sun exposure leads to pigmentation disorders, wrinkling and loss of reflectance quality. We're seeing all that in people in their 20s," Dr. Glogau said. **Dj**

Lisette Hilton



More Information

For an authoritative source of information about the effects of aging, smoking, sun and environmental exposures on the skin, and what treatments are available to reverse the signs of aging, visit **AgingSkinNet** at

www.skincarephysicians.com/agingskin.net



AgingSkinNet is an online patient education service of the American Academy of Dermatology, supported by an unrestricted grant from Ortho Dermatological.

100s AND BEYOND...

HOW OLD CAN SKIN GET?

The oldest living skin must have belonged to Jeanne-Louise Calment of France (1875-1997), who, according to the Guinness Book of World Records, had the oldest fully-authenticated age to which any human has ever lived, 122 years and 164 days. Clement was once quoted as saying, "I only have one wrinkle, and I'm sitting on it."



Sun Damage starts Early *and* Increases with Time

Viewed through the lens of a standard camera (left and center photos), sun damage is not readily apparent. However, images of the same people taken with an ultraviolet camera lens (right photos) dramatically show the extent of sun damage that has occurred. Sun damage can be seen as early as infancy and accumulates with each passing year of sun exposure.

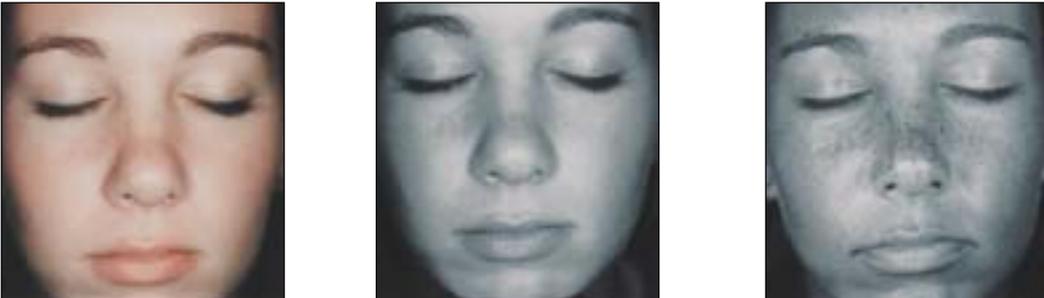
4 YEARS

Early sun damage is evident on this 4-year-old.



17 YEARS

This teenager already has significant sun damage because of deliberate tanning on the beach and in tanning salons.



37 YEARS

Sun damage is accumulating under the surface of the skin.



64 YEARS

Years of sun damage have taken a toll on the skin of this beach community resident.



RESEARCH HORIZONS

BOTULINUM TOXIN

receives FDA APPROVAL FOR COSMETIC USE

Botulinum toxin injections are one of the fastest growing cosmetic procedures in the United States today to remedy vertical lines between the eyebrows and on the bridge of the nose, squint lines or crows feet at the corners of the eyes, horizontal lines on the forehead, and the muscle bands on the neck, called "turkey neck."

According to *Newsweek*, more than 1.6 million cosmetic botulinum toxin procedures were performed last year on roughly 850,000 patients and the therapy is being used in 70 countries. Beyond its cosmetic use, it has been used to treat excessive sweating, post-stroke spasticity, back spasms, and headache.

This year, the Food and Drug Administration (FDA) announced the approval of Botulinum Toxin Type A to temporarily improve the appearance of moderate to severe frown lines between the

eyebrows. Botulinum Toxin Type A is a protein produced by a type of bacteria called *clostridium botulinum*. Dermatologists inject small doses of sterile, purified botulinum toxin into the affected muscles. The toxin paralyzes or weakens the injected muscle, suppressing muscle contraction and decreasing the ability for frown lines to form.

Botulinum toxin is used to treat several muscle disorders. The FDA first approved botulinum toxin in 1989 to treat the eye-muscle disorders called blepharospasm (uncontrollable blinking) and strabismus (crossed eyes). In December 2000, the FDA approved botulinum toxin for treating a disorder that causes severe neck and shoulder muscle contractions (cervical dystonia).

In recent years, the drug proved effective in clinical trials to treat lines located in the eyebrows (glabellar lines), paving the way for the recent FDA approval of botulinum

toxin for cosmetic use in the treatment of wrinkles. The FDA recommends that patients receive botulinum toxin injections only once every three months, that the lowest effective dose is used, and that its usage should be reserved for adults age 65 and younger.

Common side effects following injection include headache, respiratory infection, flu syndrome, droopy eyelids (blepharoptosis) and nausea. Less frequent adverse reactions (occur in less than 3 percent of patients) include pain in the face, redness at the injection site, and muscle weakness. These reactions are generally temporary, but could last several months.

Although the use of botulinum toxin in cosmetic procedures is in widespread use today, the American Academy of Dermatology warns against its use in casual social settings, or so-called physician hosted "Botox parties," especially when alcohol is served.



Your clothes are wrinkle resistant. Why isn't your skin?

There's no longer any reason people need to look older than they actually are. These days there are all sorts of new treatments, medications and surgical procedures that can actually minimize wrinkles, lines and spots. That's why you really should see a dermatologist. Not everyone realizes that dermatologists are the recognized experts in



problems related to skin, hair and nails. And they receive constant ongoing training about the newest technologies, treatments and medications. So they know all the options available. For a free pamphlet on aging skin and the names of dermatologists in your area, you can just call us toll free 1-888-462-DERM.

Cosmetics + Pharmaceuticals



= *Younger Looking Skin*

In a not too distant past, it was suggested that men and women should grow old gracefully, and that nothing short of a miracle, or a plastic surgeon's knife, could eliminate wrinkles, crow's feet or sun damage. But with the birth of cosmeceuticals, that may no longer be the case.

"Cosmeceuticals are part-pharmaceutical, part-cosmetic skin preparations administered not to treat disease, but to make aged skin look younger," said board certified dermatologist Marianne N. O'Donoghue, M.D.

Cosmeceuticals were born in the 1980s when doctors noticed that patients using a vitamin A derivative for treatment of their acne experienced a decrease in wrinkles. The potential for a true anti-wrinkle cream sparked follow-up studies and the era of cosmeceuticals began.

TOPICAL CREAMS & LOTIONS

RETINOID is a vitamin A compound that occurs naturally in the skin and can be found in many forms, including isotretinoin, trans retinoic acid and retinol. Retinoids are available mostly by prescription, but some, such as retinal, are beginning to appear in creams and lotions available over the counter. These compounds work by increasing the rate of skin cell division and turnover and may generate new collagen, making skin firmer and plumper.

"If you have sun damage, fine lines or rough, dull skin, you may be a candidate for retinoid therapy," said Dr. O'Donoghue. "The success of retinoids is highly documented and they are widely prescribed."

ALPHA HYDROXY ACIDS (AHAs) are organic chemicals that include glycolic, lactic, citric and tartaric acids. AHAs dissolve the protein bond that keeps dead skin cells attached and may decrease acne by clearing pore-clogging cells. They may also improve the complexion by lightening dark spots or excessive pigmentation caused by melasma, a common skin condition that affects pregnant women.

AHAs may be irritating to sensitive skin, and some opponents suggest too much use may strip the skin of too many cells, but Dr. O'Donoghue suggests that, "AHAs give rapid and marked results and are extremely beneficial in reducing signs of aging, acne and sun damage."

BETA HYDROXY ACIDS (BHAs), including the widely used salicylic acid, have been used for many years on dry, scaly skin and warts. Like AHAs, BHAs shed excess skin cells, but also offer an anti-inflammatory effect, which not only prevents future acne but calms inflamed spots.

Ascorbic acid, or vitamin C, (found in vegetables and citrus fruits) is sometimes prescribed before a surgical or resurfacing procedure to neutralize free radicals and boost collagen production and tissue healing.

ANTIOXIDANTS

"**VITAMIN C** preparations may reduce fine lines and wrinkles and lessen the severity of a sunburn, but there is no scientific proof of its effectiveness yet, so it's not as widely prescribed," Dr. O'Donoghue explained.

KINETIN is an antioxidant and a hormone-like growth factor from plant and yeast. There is some evidence that kinetin may influence cell growth and slow the aging process, but its use in cosmeceuticals is fairly new and long-term effects are not yet known.

VITAMIN E is another antioxidant that may have anti-inflammatory effects on the skin. Although there are a limited number of studies on vitamin E applied topically, it has been noted to improve moisture, softness and smoothness and also protect against photo damage.

COENZYME Q10 is a naturally occurring antioxidant present in the skin, and may retard some of the aging process and soften and firm the skin, but there is currently little clinical data available to support this claim.

BEST RESULTS

As the list of cosmeceuticals continues to grow, so do manufacturers' claims. Dr. O'Donoghue suggests only using products approved by the U.S. Food and Drug Administration (FDA).

"It can be difficult to determine which cosmeceutical will work best on your skin type," said Dr. O'Donoghue. "For significant improvements, use a cosmeceutical prescribed by a dermatologist."

And for the best anti-aging approach, wear a broad-spectrum sunscreen with a sun protection factor (SPF) of at least 15 every day. **Dj**



Amy Gall

Time to Remove that Mole?



Everyone has moles. Although most people think a mole is just a round, dark brown spot, moles come in many shapes and sizes. Moles can be present at birth or acquired throughout life, but most appear during the first 20 years of a person's life. The incidence of moles, or nevi, as doctors call them, tend to increase in number throughout childhood, peak in adolescence, and typically wane in older adulthood.

Most moles are not cancerous and don't cause a problem. But occasionally, a mole changes in appearance, is irritating or may appear "unattractive." In these cases, the mole or moles may need to be removed.

"Atypical appearance of a mole is reason enough to recommend removal," said Christine Lee, M.D., dermatologic surgeon, Walnut Creek, Calif.

Moles are removed for a number of reasons. For example, moles that are exposed to continual physical irritation and demonstrate periodic enlargement and/or discoloration should be removed to avoid confusion with a malignant lesion. Often, shaving irritates a mole enough to warrant removal. In addition, moles located in the belt or bra strap area can be subject to irritation and are likely to require removal.

"In general, a sudden and rapid change in color, size, or shape should be regarded as suspicious if it occurs in an individual lesion," said Dr. Lee.

In fact, although moles normally grow in proportion to the growth surges that occur in children, any mole undergoing independent growth may require removal. Additionally, any mole displaying atypical appearance, for example, very dark pigmentation or an unusual pigment pattern, is cause for concern. Other "atypical" features can be detected by using the ABCD rule (see sidebar) of skin cancer screening and self-examination: **A**symmetry (irregular shape), **B**order (irregular in shape and color), **C**olor (variations in pigment in a single mole) and **D**iameter (rather large size of 6mm or bigger than a pencil eraser).

If a patient simply wants to have a mole removed it can be removed, said Dr. Lee. In fact, she estimates that although about 70 percent of mole removals in her practice are done to prevent or diagnose skin cancer, as many as 30 percent of mole removals are done for cosmetic reasons.

"Often, 'ugly' moles are found to have atypical features as well,"

Dr. Lee noted, so there could be more than one reason for removal. Furthermore, like any other lesions removed, a mole removed for cosmetic reasons should be submitted for pathologic evaluation.

In addition to the above reasons, a mole can also be considered for removal if located in a hidden site where it can not be easily examined or monitored on a regular basis, and moles in unique locations on the body — such as on the hands, feet, mucus membrane of the mouth or the eye — are often suspicious and should be evaluated appropriately.

Annette Wagner, M.D., a pediatric dermatologic surgeon, Childrens Memorial Hospital, Chicago, said moles that are present at birth or are acquired shortly after birth are often recommended for removal, because these moles called **congenital nevi** may have a greater potential for developing into the deadly skin cancer, malignant melanoma, than moles acquired after the first year and a half of life.

"The ability to remove congenital nevi is surgically preferable during infancy because this type of mole tends to grow with the child," Dr. Wagner explained.

Procedures to remove moles generally take only a short time and can be performed in a dermatologist's office. Surgical excision is the most common method used for mole removal. The excision is generally done using a local anesthetic in older children and adults.

Dr. Wagner commonly uses a general anesthetic when removing congenital moles and larger moles on younger children and infants. **D;**

"...a sudden and rapid change in color, size or shape should be considered suspicious if it occurs in an individual lesion."

Ruth Ann Grant

Skin Cancer Quiz

Test Your Knowledge *about* Skin Cancer

The following quiz is a test of how much you know about skin cancer. It is designed to help you learn more about it and how to prevent it.

Question 1. TRUE OR FALSE

Skin cancer is the most common form of cancer in the United States.

Question 2. TRUE OR FALSE

The development of a new mole or a change in an existing one may be a sign of skin cancer.

Question 3. TRUE OR FALSE

People with dark skin can't get skin cancer.

Question 4. TRUE OR FALSE

You can't die from skin cancer.

Question 5. TRUE OR FALSE

You have an increased risk of malignant melanoma if your parents, sister or children have had melanoma.

Question 6. TRUE OR FALSE

If you stay out of the sun, you will never get skin cancer.

Question 7. TRUE OR FALSE

Malignant melanoma, a serious type of skin cancer, cannot be cured.

Question 8. TRUE OR FALSE

Melanoma can occur anywhere on your body.

Question 9. TRUE OR FALSE

Redheads and blondes are more likely to get melanoma.

Question 10. TRUE OR FALSE

If you were born with one or more moles, you are more likely to develop malignant melanoma.

Quiz Answers

Question 1. TRUE. Skin cancer is the most common form of cancer in the United States with about 87,900 new cases expected next year.

Question 2. TRUE. The development of a new mole or any changes in the size, color, shape or texture of a mole may be a sign of skin cancer and should be reported to a dermatologist or personal physician right away.

Question 3. FALSE. Anyone can get skin cancer. Darker skinned people have more melanin, a brownish pigment, in their skin which serves as a buffer by absorbing ultraviolet rays, thereby lowering, but not eliminating, the risk of skin cancer.

Question 4. FALSE. This year 7,400 Americans will die from malignant melanoma, which is responsible for six out of seven skin cancer deaths.

Question 5. TRUE. Your risk is increased if your parent, child or sibling has had melanoma.

Question 6. FALSE. Even though there is a strong correlation between ultraviolet exposure to the sun and all types of skin cancer, you can still get skin cancer if you stay out of the sun. It is important to regularly examine your skin for signs of cancer regardless of how much sun you get.

Question 7. FALSE. When treated in its earliest stage, melanoma can be cured.

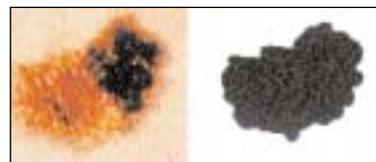
Question 8. TRUE. Melanomas can develop anywhere on the body, even places that are not exposed to the sun, such as the soles of the feet.

Question 9. TRUE. Redheads and blondes have a two-fold to four-fold greater risk of developing melanoma.

Question 10. TRUE. Most moles develop some time after birth, but some people are born with moles. "Birth Moles" increase a person's risk for melanoma.

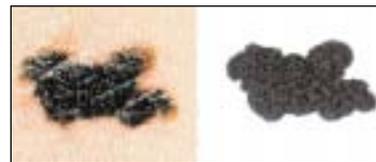
ABCDs OF MELANOMA

During a skin cancer screening, as well as recommended patient self-exams, dermatologists commonly apply the ABCD rule to diagnose melanoma. Skin lesions are more likely to be malignant melanoma when one or more of the following is observed:



ASYMMETRY

One side of a mole doesn't look like the other side.



BORDER

The edges of a mole are ragged or uneven.



COLOR

More than one color is present in a single mole. Melanoma may include streaks of tan, brown, black, red, white, and blue.



DIAMETER

A mole becomes larger than pencil eraser size or changes its shape.



that's news to her...

A Reporter's Fight Against Skin Cancer

New Yorkers know Michelle Charlesworth as a member of the WABC Eyewitness News Team since 1998. As a reporter and anchor for the station, Charlesworth has been used to finding and reporting the more interesting aspects of metropolitan New York life. But in February of 2001, Michelle Charlesworth received some news of her own.

On assignment in New York to collect information for a story about power liposuction, Charlesworth was in the office of dermatologist Bruce Katz, M.D. The WABC cameraman who was assisting Charlesworth asked Dr. Katz about a mark on his forehead which subsequently turned out to be nothing. But the question prompted Charlesworth to ask about a mark on her own face which, to her surprise, turned out to be skin cancer.

“When I first met Michelle, I noticed she had a slight depression on her right cheek,” Dr. Katz said. “She was wearing make-up because she was on camera, so I really couldn’t tell much about it, but I thought it looked unusual, particularly on a 30-year-old woman.”

Dr. Katz had Charlesworth take off her makeup so that he could get a better look at the spot with a magnifying glass. He observed “a pearly depression in the skin with little broken blood vessels on it — often a sign of basal cell carcinoma, a form of skin cancer,” Dr. Katz said. “She told me she’d had it for a year or two, and that it had increased in size — other indicators of basal cell carcinoma.” He told Charlesworth on the spot that she needed to have a biopsy.

Charlesworth said if she hadn’t been in the dermatologist’s office as a reporter that day, she might never have had the mark examined. “Had [the cameraman] not asked, I never would have asked about it,” she said. “I had gone many times to get a facial and my facialists had told me there was no problem whatsoever. It looked to them like a backed-up pore. So I wasn’t alarmed or concerned about it. But

facialists are not dermatologists. They don’t know what to look for, they can’t tell you what to be concerned about.”

Dr. Katz performed a “punch biopsy,” wherein he removed a tiny bit of skin (about 1/8 to 1/16 of an inch) to be examined. A few days later, Charlesworth received the results of her biopsy and it confirmed Dr. Katz’s suspicions. She had basal cell carcinoma.

Charlesworth and Dr. Katz determined that sun damage was probably the culprit. She had been a tanner all her life, never suspecting that the sun’s rays would pose a threat to her health. “I lived in the south growing up and I was an avid swimmer, and I always got brown during the summer, but I never burned, ever,” she said.

As an adult, her profession as a news reporter put her in the public eye and Charlesworth paid more attention to her face, wearing sun block when outdoors and getting facials periodically. Her goal, however, was to stave off wrinkles and premature aging — she never worried about skin cancer. “It’s very ironic — the one area of my skin that I thought I was really taking care of was my face. Since age 23, I’ve worn sunscreen and a hat when I

went out in the sun. I don’t freckle and I don’t have moles. So I didn’t fit the average profile of someone that would be prone to skin cancer.”

In fact, Charlesworth noticed that the average age of skin cancer patients in Dr. Katz’s office was about 72. “They looked at me, this 30-year-old woman, like I didn’t belong there.”

As Charlesworth learned, however, sun damage can occur at any age, and can show up as skin cancer at some point later in life. According to the American Academy of Dermatology, 80 percent of sun damage occurs before the age of 18, and one in five Americans will develop skin cancer in their lifetime.

“I’d been aware that if your skin changes color at all, you’ve damaged it. But I didn’t realize that sort of damage could be skin cancer,” Charlesworth said. “I only looked for the more obvious signs, like a mole that changes in color or size. This wasn’t anything like that, and it was barely raised. But it turned out to be just the tip of the iceberg.”

The true extent of the carcinoma could not be known until Charlesworth had undergone surgery to have it removed.

“I didn’t fit the average profile of someone that would be prone to skin cancer.”

She now had two grave concerns — the severity of

her carcinoma and the effects that surgery would have on her face. Charlesworth was told, even before surgery, that she was definitely going to have a “sizeable scar” on her face. “I’ll never forget those words,” she said. As someone who made her living in front of the camera, it was a frightening scenario. “I anchor the news on the weekend, and the Sunday before my surgery, I felt almost certain it would be the last time I would ever anchor.”

Despite her fears, Charlesworth remarked that she “felt good about the fact that I was in the hands of capable surgeons, and that I was taking care of the problem.”

The surgical team used a technique called Mohs surgery to remove the cancer. “Mohs is a microscopic form of skin surgery in which a small area is removed, dyed, and frozen (with a machine called a ‘cryostat’),” Dr. Katz explained.

Under the microscope, Dr. Katz looked at the sample to make sure the entire border around the skin cancer is uninvolved (completely out). “If the margins aren’t clear of cancer, we go back and take out another larger margin of tissue to determine if that’s clear,” he said. “We repeat the process until the entire border around the cancer is clear.”

Dr. Katz said one of the benefits of Mohs surgery is that it allows dermatologists to analyze tissue immediately. “With other surgeries you have to wait a few days for analysis of the sample before you determine if further surgery is needed. Dr. Katz added that Mohs surgery allows dermatologists to take out the smallest possible piece of tissue, which can result in less scarring. “Because it’s such a definitive approach, it has a high cure rate,” he said.

Charlesworth’s case was a challenge, however, because the cancer had spread. The surgical team had to go in three times to get all of the affected areas. Charlesworth was awake under a local anesthetic the entire time — eight hours.

being put on gauze strips next to me. I couldn’t see myself, but I knew that if that’s what was missing, I had a huge hole in my face.”

The cancer was successfully removed, but the extensive surgery heightened Charlesworth’s secondary fear — that her looks might be permanently marred. “After Mohs surgery there was a defect in her face about the size of a quarter,” Dr. Katz said, “and it was in an area in the middle of her cheek that’s difficult to close without leaving substantial scarring.

“I enjoy being a pretty funny person, and I didn’t want this to change my smile,” Charlesworth recalled. “When you lose your smile, it can change your personality.”

Waiting in the wings, however, was plastic surgeon Michael Bruck, M.D., who had observed Charlesworth’s entire surgery. The difficulty for Dr. Bruck was that the hole in Charlesworth’s face was across her cheek, not a manageable place to hide a scar. But for the next 3-4 hours, Dr. Bruck worked with the goal of relocating the scar so that it would be

hidden in the folds of Charlesworth’s laugh line.

“Dr. Bruck stretched my skin in three

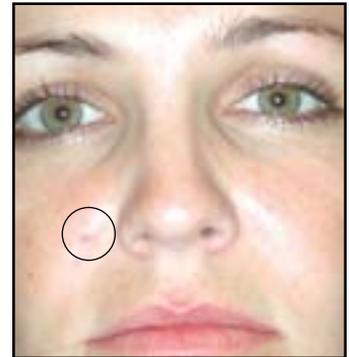
different layers to do what might be called a ‘reverse face-lift’ — instead of pulling skin back to my ears, this pulled the skin down toward my mouth,” Charlesworth explained. “Without that surgery, the scar would have gone in a straight line right across my cheek.” It took 27 stitches, but it was a success. She would still have her smile.

Incredibly, just three weeks later, she was fully recovered and back on television again. Not long after her recovery, Charlesworth appeared on *Good Morning America* with no noticeable signs of her recent surgery.

“Initially it was a little red and swollen, and I did some laser surgery to flatten it down,” Dr. Katz said. “But within a week,

see A Reporter’s Fight Against Skin Cancer page 20

“I could see chunks of my cheek and face



Before surgery, the lesion was apparent in Charlesworth’s right laughline.



Surgery created a large defect after her cancer was removed and before the wound closed.



6 weeks post operative, her scar was already fading.



Michelle Charlesworth accepting the AAD's Gold Triangle Award for her efforts to raise public awareness about skin cancer.

the scar was less noticeable and with time its appearance improved even more. You can barely see anything without her makeup on, and with makeup, you can't see anything at all."

"My face looks the same as it did before surgery," Charlesworth said. "It looks like it never happened."

Although her cancer was effectively removed, Charlesworth has stepped up her skin protection regimen. "Now I wear a 30 SPF sun block *all the time* when I'm outdoors, not just when I'm going to the beach." She also sports a "big ol' floppy hat" when she's outside to further protect her from the sun's rays. "Maybe I look ridiculous, but I don't care," she said.

In August, 2002, Charlesworth received a Gold Triangle Award from the

American Academy of Dermatology for her efforts to raise public awareness about skin cancer, and she continues to share her experience as a cautionary tale for others.

"No matter what your age or skin tone, be aware that skin cancer can occur," Charlesworth warned. "If you see any abnormality on your skin — or if you see it on someone else that you know and love — it should be checked out. That little spot on my face that turned into a giant problem was not something that had given me any previous cause for concern. So I tell people, don't just look for unusual moles or freckles, if you see any change in your skin, have a dermatologist check it out." **Dj**

Dean Monti

Look Beyond Your Face

Skin Cancer Can Occur Anywhere

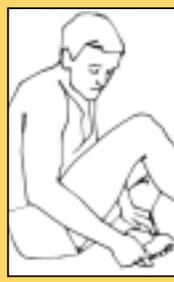
Prevention of melanoma/skin cancer is the best weapon against these diseases. But if a melanoma should develop, it is almost always curable if caught in the early stages. Practice periodic self-examination to aid in early recognition of any new or developing lesion. The following is one way of self-examination that will ensure that no area of the body is neglected. To perform your self-examination, you will need a full length mirror, a hand mirror and a brightly-lit room.



Examine body front and back in mirror, then right and left sides, arms raised.



Bend elbows, look carefully at forearms, back of upper arms, and palms.



Next, look at backs of legs and feet, spaces between toes, and soles.



Examine back of neck and scalp with a hand mirror. Part hair to lift.



Finally, check back and buttocks with a hand mirror.

an ounce of prevention is worth a pound of cure

Do You Have “Smoker’s Face”?

For many people, the physical signs of aging are a stressor. And for many people, smoking is perceived as a way to combat stress. What many people don’t realize, however, is that smoking can hasten and aggravate the physical signs of aging on the skin.

Nicotine — an addictive substance present in cigarettes — can diminish the body’s blood flow, preventing the necessary oxygen in blood cells from reaching the skin. The deep, premature wrinkles and discoloration caused by cigarettes is called “smoker’s face.” Although this is the most common dermatological effect of smoking, cigarettes have also been associated with skin cancer and an increased risk of death caused by the deadliest form of skin cancer, melanoma.

“Crow’s feet” — wrinkles formed at the outer edge of the eyes — and sallow, pale skin around the eyelids are also linked to cigarette smoking, likely caused by constricted blood flow to the eyelid and squinting to protect the eyes from the drifting smoke pouring out of a lit cigarette.

The risk of developing “smoker’s face” is related to a smoker’s skin color and gender. For instance, the risk is much greater for white, female smokers than their black and male counterparts, because white women are more susceptible to skin damage caused by aging.

WHY GENDER IS A FACTOR

“The male hormone (androgen) causes a man’s dermis — the lower layer of the skin — to be thicker than a woman’s,” said Jerome Z. Litt, M.D., assistant clinical professor of dermatology at Case Western Reserve University School of Medicine, Cleveland, Ohio, and author of *Your Skin From A to Z*. “As a result of this extra thickness, he is better protected from the weather, such as cold and wind, and less likely to have aging damage from the sun.”

According to Dr. Litt, it is the tightly packed collagen fibers in men’s skin that adds to its resilience. Droopy skin around the throat or those little vertical lines (so-called “whistler’s wrinkles”) on the upper lip — which are possibly aggravated by smoking or putting on lipstick as well as sun exposure — occurs mainly in women.

WHY SKIN COLOR IS A FACTOR

According to Dr. Litt, variations in skin color affect variations in developing smoking-related wrinkles. “The white female, who has been smoking since she was 18 years of age and who smokes one or two packs a day, will develop wrinkles in her late 30s or 40s,” he explained. “If she is of Celtic origin, she will develop them earlier — and much earlier than her southern Mediterranean neighbor, whose skin is darker and thicker and whose collagen and elastic fibers are not nearly as fragile as hers.”

AVOIDING “SMOKER’S FACE”

Not smoking is the best approach to prevent these effects and the other health risks associated with smoking.

“Other than corrective (plastic) surgery,” Dr. Litt said, “there are no known topical preparations to thwart the development of symptoms of ‘smoker’s face.’ Many of the alpha-hydroxy acids and some skin peels can reduce the wrinkling, as it can for the normal aging process and for the ravages of the sun. But there is nothing specific for the so-called ‘smoker’s face.’” **D**

Karen Stein



PROGRESSION OF THE EFFECTS OF SMOKING

Cigarette smoking mostly affects the skin of the face and hands — specifically around the mouth, eyes, and fingernails. According to Jerome Z. Litt, M.D., assistant clinical professor of dermatology at Case Western Reserve University School of Medicine, Cleveland, Ohio, the progression of the effects of smoking on the skin depends on several factors:

- How long the person has been smoking
- How many cigarettes/packs per day are smoked
- Age of the patient
- Skin color of the patient
- Sex of the patient
- Amount of sun exposure by patient

According to a study by Alan S. Boyd, M.D., of the Department of Dermatology at Vanderbilt University, excessive, long-term smoking causes decreased blood flow to the face and allows for toxic substances to reach facial tissues, causing wrinkles. In addition, Dr. Boyd suggests that the continuous presence of a heat source near the face — that is, a lit cigarette — plays a substantial role in causing “smoker’s face.”

“Unfortunately, the skin is like a sponge and a bank,” said Dr. Litt. “It stores these degenerative processes for a lifetime. But, like sun exposure, you can say it’s *never* too late to retard (but not halt) the process.”

Passport to Health...



Beware of Tropical *and* Foreign Skin Diseases

Many people are tempted each year to seek out exotic travel destinations. Some environmental conditions in these locations, however, put travelers at a greater risk than they would experience in industrialized countries and urban locales.

“While the type and severity of illness depends on a variety of factors such as a person’s age, the country visited, lifestyle, and duration of stay, it is estimated that 3 to 10 percent of travelers experience problems related to the skin, hair, and nails,” said Luiz G.M. Castro, M.D., Division of Dermatology, University of Sao Paulo, Brazil.

Dr. Castro said that overexposure to the sun in tropical areas is one of the most common problems. Travelers are often unaware that the sun’s rays are more intense in tropical areas nearest to the earth’s equator, which leads many to develop severe sunburns. In addition, exposure to ultraviolet radiation also temporarily suppresses the immune system and may be responsible for other illnesses. The reactivation of herpes simplex is a common response to overexposure to the sun.

Fungi, common in warm and damp climates, can cause external or deep-seated infections. Sporotrichosis, the most common urban fungal disease affecting individuals with healthy immune systems,

normally is transmitted after a thorn or an animal bite punctures the skin. The affected skin becomes inflamed, red, and tender and may become ulcerated and secrete fluids.

Parasites are the source of many infections, and warm, unsanitary conditions are the most obvious breeding grounds, according to Mervyn Elgart, M.D., University Dermatology Associates, Washington, D.C.

“In the United States, we have insects like flies

and mosquitos that are basically alive during the summer and die off in the winter,” Dr. Elgart said. “But in many places, like the Middle East and India, they have a life cycle approximately every three months.”

Dr. Elgart said “creeping eruption” is a frequent summer infection. Often it is picked up through the larvae of dog or cat feces in the sand. “The eggs hatch and newly formed organisms

try to get into an animal, such as a dog, but they can’t always tell the difference between a dog and human,” said Dr. Elgart. When the larva penetrates the traveler’s skin, red fluid-filled bumps form in a continuous pattern as the worm advances a few millimeters a day. “In humans, the larvae can’t get past the barrier of the epidermal junction, so it just wanders around on the surface of the skin and produces a lot of inflammation and itching.” While creeping eruption occurs domestically in the southeastern portion of the United States, Dr. Elgart said he’s seen quite a few cases that originate in the Caribbean.

In the countryside, travelers are at risk for cutaneous myiasis, an infection that is transmitted when a mosquito carrying botfly eggs bites a traveler. As these eggs are released into the skin, the affected

traveler’s skin becomes prickly and swollen and a small hole appears in the skin for the larvae to breathe.

Occurring near pigsties in parts of Africa, South America, and other areas that have low hygienic



conditions, jiggers is an infection which is caused when the fertilized female sand flea penetrates the traveler's skin and burrows into the tissue. If itchy bumps develop, often on the soles of the feet, travelers should



consult a dermatologist as soon as possible for a rather simple surgical extraction.

Often the source of a parasite is unknown and dermatologists become detectives, determining treatment from the signs and conditions present in the skin.

"Sometimes dermatologists have to work with the effect when they cannot identify the exact cause," Dr. Elgart explained.

"People who travel a lot in Africa, for instance, often come back having been exposed to an unknown parasite and end up with tropical



eosinophilia. Treatment with ivermectin has been effective in some cases where the parasite is unknown."

Leishmaniasis, transmitted by an insect bite, is epidemic in many areas of the world. Due to its prevalence near jungles, this infection is very common in army personnel and affected many members of Operation Desert Storm. "What we

said. "We see it primarily in patients returning from the Middle East or South America. They are bitten by the insect that transmits the disease and they develop a skin ulcer." Dr. Elgart said that although leishmaniasis is rare in humans here in America, travelers need to be wary because it is a potentially destructive condition and little has been accomplished to stop its prevalence. "I see at least one or two cases a year," he said. Following treatment with injection or intravenously, the average recovery time of leishmaniasis and the ulcers it causes is one month. Antifungal drugs have also appeared to help treat the condition, Dr. Elgart added.

While not very common, spider bites are most likely to affect travelers who participate in hiking or camping on ecological adventures. After a spider bite, the tissue may be destroyed and an ulcer may develop. While anti-venom is necessary for poisonous spiders, most bites can be treated symptomatically.

*if you're going to travel
wear protective clothing
and apply insect repellent*

While ants are common throughout the world, bites from them are rare. Fire ants, however, seen in other countries and now invading New Orleans, much of the Southeast and Texas, can cause serious problems. "Their sting may be no worse than a wasp's but they travel in large groups," Dr. Elgart said. "So if you fall asleep near a nest of fire ants, you could be in big trouble." Travelers who are

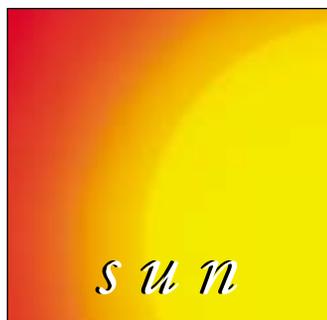


bitten by an ant will develop itching, burning, and red pimples within a few minutes that will later increase in size as they fill with pus. Ant bites are usually treated symptomatically using analgesics and topical anesthetics.

"I think the most important thing to do is try to avoid getting bitten by insects, since very often they're carrying things you don't want to bring home," Dr. Elgart said. "So if you're going to these areas it makes good sense to wear protective clothing and apply insect repellent." Di

Dean Monti

When you travel, beware of:



The sun's harmful rays are more intense in tropical areas nearest to the equator.



stings

Always wear protective clothing and apply insect repellent.



Animal feces carrying parasite larvae are often hidden on the beach.