

# DERMATOLOGY



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

*fall 2001*

# insights

## A Closer Look at Teens and Skin

Tattoo and piercing perils

How emotions affect skin, hair & nails

Talking to your teens about STDs

Teens and tanning

**Dry winter skin**

*treatment and prevention*

**The war on warts**

*know your enemy*

**Better scalp care**

*tips for your top*

*tattoo removal  
new scar treatment*



*plus:*

**Christopher Knight  
talks about acne, ADD  
and The Brady Bunch**

*Compliments of the American Academy of Dermatology and:*



### Sun Safety a Concern at Any Age

In this issue of *Dermatology Insights* you will find a number of issues relating to skin conditions, many focusing on how these problems affect the lives of teens.

While there are several well-known skin problems, like acne, that primarily afflict teenagers and make their lives difficult to endure, one condition that is not always properly considered during teen years, that can have a grave impact later in life, is skin cancer.

Research now indicates that many forms of skin cancer can have their beginnings in overexposure to sun during youth. In fact, 80 percent of an entire lifetime of sun exposure occurs before the age of 18.

Skin cancer often does not appear until many years after the sun exposure. A 40-year-old with a melanoma, the deadliest form of skin cancer, may be experiencing something that could have been prevented with proper sun protection in the teen years.

It is this knowledge that prompts the American Academy of Dermatology to emphasize the importance of year-round sun safety. Sun damage doesn't just affect teenagers at the beach — it can occur anywhere, any time your skin is overexposed to sunlight, during all four seasons.

A recent study of teen tanning habits (see page 6), indicates that teens believe they look healthier and more attractive with a tan, and a large percentage of them never use sun block. But the only way to stay truly healthy and attractive is to heed warnings about sun exposure. By using effective sun blocks and a little common sense, you can still enjoy the great outdoors without sacrificing your skin later in life.

Do yourself a favor and get your skin off to the right start. Sun safety tips and other useful information about your skin, hair, and nails can be found at the AAD Web site, [www.aad.org](http://www.aad.org).

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**80 PERCENT OF SUN DAMAGE OCCURS BEFORE AGE 18.**

EXPOSURE TO THE SUN CAN PREMATURELY AGE, DISFIGURE, EVEN KILL. TODAY, EVERY HOUR, SOMEONE WILL DIE OF SKIN CANCER. PROTECT YOURSELF. PROTECT YOUR KIDS WHILE THEY'RE STILL KIDS. USE SUNSCREEN. SEEK SHADE.



AMERICAN ACADEMY OF DERMATOLOGY  
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New Treatments

# Take the Scare out of Scars

**What do acne, chicken pox, sports injuries and surgeries have in common?**

All of these life experiences can leave their mark on you, literally. But they don't have to scar you for life, thanks to a variety of procedures that your dermatologist can use to improve the appearance of your skin.

"We can help more than ever before with combined and tailored treatments to the types of scar for correction," said Harold J. Brody, M.D., clinical professor of dermatology at Emory University School of Medicine in Atlanta.

Treatments for scars include methods to flatten them through resurfacing, which can be performed using a laser, dermabrasion or chemicals.

**LASER TREATMENTS**

A laser, which delivers short bursts of energy through its beams, is used to smooth and sculpt scars to improve the skin's appearance. Lasers commonly used for resurfacing include the **Erbium:YAG** and **CO<sub>2</sub>** laser.

The Erbium:YAG laser emits light through short bursts of energy that is absorbed by the water in the skin. This allows for very precise sculpting of irregular scars. With the latest Erbium:YAG laser, recovery times are faster and a shorter length of post-surgery redness occurs.

The CO<sub>2</sub> laser works well for lifting "depressed" scars that give the skin a crater-like appearance, common with acne. It produces more heat than the Erbium:YAG laser, allowing the energy to go deeper into the skin and tighten the skin's collagen fibers. By tightening those fibers, the CO<sub>2</sub> laser causes the scars to lift and look more normal in appearance. Recovery typically takes seven to nine days.

In many cases, only one laser treatment is necessary to get permanent results.

Although most laser treatments offer similar results, the type of laser used depends on the dermatologic surgeon's technique and preference, according to Dr. Brody.

Another type of laser, the **pulsed dye laser**, can improve the appearance of stretch marks and keloids, which are thickened scar tissue. It can also help temporarily reduce the redness and broken blood vessels of the skin caused by rosacea. The pulsed dye laser typically requires two to three treatments.

**RESURFACING**

**Dermabrasion** is a procedure that involves the use of a rotating instrument to "sand" down scars. A new layer of skin replaces the damaged layer resulting in a smoother appearance.

**Chemical peels** work well for mild to moderate scarring and for evening out skin tone. Basically, a chemical solution is applied to the skin causing a reaction similar to sunburn. After the face peels for several days, new, smoother appearing skin replaces the damaged skin. "A wide

variety of chemical peels are available to improve the appearance of acne and brown spots," said Jeanine B. Downie, M.D., a board certified dermatologist at Image Dermatology in Montclair, N. J.

**Surgical treatments** for individuals with depressed scars involve lifting the scars and then filling them with collagen or fat, Dr. Brody explained. These treatments are especially helpful to correct severe scarring caused by cystic acne, which is characterized by large, deep-seated lumps.



Scar Before CO<sub>2</sub> Laser Treatment



Acne Before Resurfacing Treatment



Scar After CO<sub>2</sub> Laser Treatment



Acne After Resurfacing Treatment

*"When you get a scar, you should try to treat it as soon as possible...and whatever you do, don't pick it."*

**OTHER PROCEDURES**

A procedure called **autologous fat transfer** involves injecting small amounts of fat below the skin's surface to lift the scars. The fat is taken from another part of the patient's body. While results typically last six to 18 months, they may become permanent after many procedures.

**Punch excision surgery** is another option for individuals with deep "ice pick" scarring that doesn't improve with laser surgery or fat transfer. In this procedure, the scar is surgically removed; then either a patch of skin from elsewhere on the patient's body is placed in the space, or the wound is closed with

**s t i t c h e s .** **Subcision** is a procedure that involves lifting indented scars with a surgical instrument.

"Subcision is basically using a needle to get underneath a scar, like a chicken pox scar, and sweeping the scar tissue that is binding it down underneath and keeping the scar indented," explained Dr. Downie. The effort negates the need to plump up the skin with collagen.

Any one of these treatments, used alone or in combination, can improve the appearance of skin for the majority of people with scars. However, some individuals, such as those who tend to get keloids, have recently taken the acne

medication isotretinoin, or who have active cystic acne, are not good candidates.

These patients are candidates for another option — **silicone gel pads**. Similar to large band-aids, they can slightly reduce the appearance of scars. "A lot of these pads can improve scars that have been around for a while, but they seem to work better on fresh scars," Dr. Downie noted.

Treating injuries and scars swiftly is the key to their minimization. She advised, "When you get a scar, you should try to treat it as soon as possible. Always wear a high-level sun block because the sun makes a scar darker. And whatever you do, don't pick it." *Dj*

*Ruth Carol*

check out [skincarephysicians.com](http://skincarephysicians.com)



[skincarephysicians.com](http://skincarephysicians.com) is a web site that provides patients with up-to-date information on the treatment and management of disorders of the skin, hair and nails. Patients and health care professionals may utilize this web site as a resource for educational literature and health guideline descriptions.



**AcneNet** features basic facts about acne, the social impact of acne, why and how acne happens, acne treatments, interactive Q & A, and more.

**EczemaNet** features facts and myths, FAQs, and treatments available for sufferers of Eczema.



**AgingSkinNet** features the latest information on the effects of aging, smoking, sun and environmental exposures to the skin.



**MelanomaNet** is an authoritative source of information about this deadly form of skin cancer.



**ActinicKeratosisNet** features the cause, prevention, and treatment of actinic keratosis, a common, unsightly disease.

**PsoriasisNet** features information about the disease, news, myths and facts, patient stories, and more.



# My acne was so bad, I asked...

*Patient Perspective by Kimberly R. Williams*

## “What’s happening to me?”

Throughout my teens and 20s I had cystic acne, a severe skin condition that covered my face. For many years, I held out hope that it would eventually go away. I tried prescription antibiotics, topical treatments and even birth control pills, but nothing seemed to help. After many years, I gave up on prescription medications for the treatment of my acne.

In 1997, things took a shocking turn for the worse. My face began to puff up with painful deep cysts. Within a couple weeks, I hardly recognized myself in the mirror. The glands on my neck became swollen and I ran a chronic low-grade fever. I was horrified! I didn't know acne could be so severe, and I couldn't understand why it was happening to me.

Weeks later, on my 28th birthday, I returned to graduate school with my head down, trying to hide behind my hair and make-up. I was so embarrassed and ashamed of the way I looked, I didn't want anyone to see me, but I had to go to class. One particularly insensitive classmate asked me in a disgusted tone, "What happened to your face?" I wanted to die. I went home, shut myself in my room and cried all day.

My life turned into a nightmare. I stayed in the house as much as I could, only leaving to go to class, to the grocery store (late at night), or to the doctor. When I did go out, I noticed people staring at me and doing double takes. Complete strangers stopped to ask me what was wrong! The pain, both physical and mental, was so constant that I couldn't think about anything else. I even considered suicide because I didn't think I could live like this for the rest of my life.

Every morning I would rush to the mirror hoping my face would be healing; that the swelling had gone down. But it hadn't. Every time a cyst healed, another one bubbled up in its place.

Over the next three months, I was subjected to an array of

reactions from the outside world — from pity to revulsion. Acne is a disease that has some negative associations. Some people erroneously assume that acne sufferers are dirty or greasy or not practicing proper hygiene. Even my closest friends and family thought that I had lost control over my acne. They asked, "Are you washing your face?" and "Are you stressed?" or "Maybe it's your hair spray." I knew they meant well, but I wanted to scream.

During this difficult period in my life, I learned a few lessons. I became more compassionate toward people with visible handicaps because I knew what it felt like to look "different." I also began to realize how much I associated my face with my identity. When I looked in the mirror and didn't see the person I wanted to see, it was devastating. But, I also learned, even though it was so hard for me to believe, that when my friends looked at me, they saw the whole me, from head to toe. I held out faith that my face would find its way back to normal.

That same year, I saw a dermatologist who prescribed the retinoid acne medication called isotretinoin, and steroids to reduce the swelling. Slowly but surely, my face returned to its normal size and shape. I felt like I had control of my life and my face again.

Today, my cystic acne recurs at times, but fortunately at lower levels. I am not currently using isotretinoin. Rather, in consultation with my dermatologist, I am using topical tretinoin and a topical antibiotic, which keeps my acne very much under control. I've retained some redness and scarring that, three years later, is not gone but is greatly diminished.

I carry a picture of myself from 1997 so that I can be grateful for the way I look and feel about myself today. I can even look back on my acne experience and treasure it as something that made me a stronger, more compassionate person. *Dj*



*Kimberly Williams in 1997, before using isotretinoin.*



*Kimberly Williams 12 months after using isotretinoin.*

### Editor's Note:

Acne can occur in varying degrees of severity, and it is highly treatable. Patients are encouraged to consult with their dermatologist to find the best treatment for their condition. Isotretinoin can cause severe birth defects and should not be used by women who are pregnant, or who plan to become pregnant. This medication has also been associated with depression. Patients should tell their doctor if they experience symptoms of depression while taking isotretinoin.

# What you should know about a treatment for severe acne

Although numerous medications are available to address the various forms of acne, according to many dermatologists nothing has proven more successful in the treatment of severe nodular cystic acne than isotretinoin.

Nodular cystic acne is characterized by severe red, tender lumps formed beneath the surface of the skin that primarily affect men and women in their 20s, 30s and 40s.

Left untreated, this acute form of acne can result in permanent, deep scarring of the skin.

A powerful retinoid taken orally, isotretinoin was introduced in 1982 and has proven to be the only medication that effectively controls severe cystic acne, the most serious form of this skin disease.

"By reducing the body's oil production and modifying its response to inflammation, isotretinoin decreases the excess sebum secretion that is associated with severe acne," said David Pariser, M.D., professor and chief, Division of Dermatology, Eastern Virginia Medical School, Norfolk, Va. "After taking the drug for a period of 20 consecutive weeks, many patients experience complete clearing of their acne."

"However, isotretinoin is a powerful drug that can cause serious side effects," he said. "Patients must be fully aware of what the drug can do before beginning treatment. For example, isotretinoin can cause birth defects. Women who are pregnant (or who may become pregnant) should not take the medication. In addition, other serious side effects, including depression are less common, but have been reported."

Female patients considering treatment with isotretinoin should only get a prescription for the drug after a pregnancy

test confirms that they are not pregnant. A second pregnancy test should be done on the second or third day of the patient's next menstrual cycle. And, patients undergoing isotretinoin treatment should always ask their dermatologists about possible drug interactions with other prescription medications, especially antibiotics, because mixing medications can result in additional side effects.

*"Patients must be fully aware of what the drug can do before beginning treatment."*

benefits, as well as serious warnings, related to using the drug," noted Shelly Sekula Rodriguez, M.D., a dermatologist in private practice and clinical assistant professor at Baylor College of Medicine, Houston. "I also talk candidly about pregnancy prevention with female patients taking the medication; I do so because I want my patients to be safe."

Common, but less serious side effects that are possible with the use of isotretinoin include dry skin, chapped lips, dry mouth, nose bleeds, dry eyes, sun sensitivity and joint pain.

"The more common but less serious side effects, such as chapped lips, go away when treatment is ended," said Dr. Rodriguez. "Also, the scientific data indicates that women can consider becoming pregnant 30 days after discontinuing isotretinoin."

Because there have been reports of a potential link between isotretinoin and depression, as well as studies confirming accidental pregnancies in

female patients taking this medication, the U.S. Food and Drug Administration (FDA) has proposed stricter controls on how and when this medication is prescribed and dispensed.

While no scientific link has been made with depression or suicide attempts in patients who are taking isotretinoin, depression is a rare event that affects certain individuals and in various degrees. Caution must be exercised with patients taking isotretinoin, and parents should be aware of the potential risks.

Currently, the FDA requires physicians to tell their patients about the important safety information regarding isotretinoin. Physicians are also required to get a written signature from adult patients, or from the parents of underage patients, who agree to undergo treatment with isotretinoin. Completing the consent form requires patients to read and initial a series of questions concerning depression.

Female patients must also complete a separate form regarding the risk of birth defects. By signing the standard informed consent/patient agreement form, patients acknowledge the possible side effects and also take responsibility for telling their doctors about any symptoms of depression or other problems that occur during their treatment.

The FDA also requires that a medication guide be distributed by physicians and pharmacies dispensing isotretinoin. Patients taking isotretinoin are required to return to their dermatologist on a monthly basis to get their prescription refilled, as well as for an assessment of their progress and/or the development of any side effects. **Dj**

*"The more common but less serious side effects go away when treatment is ended."*

Ruth Ann Grant



scaling



back on



winter skin problems

Ever wonder why your skin becomes scaly, dry, raw or itchy in winter? The skin is made up of several layers of cells and thousands of oil glands. Oil keeps skin from losing moisture and makes it soft. Washing the skin, however, strips away the oil, which has a drying effect. When it's humid, the skin retains moisture better. But when humidity drops, as it often does during winter months, your skin loses the ability to moisturize itself.

"Almost any skin condition [including atopic dermatitis, psoriasis and eczema] gets worse in the winter because there's not as much humidity in the outer layer of the skin," explained Jon Hanifin, M.D., professor of dermatology at Oregon Health Sciences University in Portland. "When the cells in the outer layer get dry, their edges curl up and the skin feels rough," he said.

Low humidity, coupled with heavier clothing and longer, hotter showers and baths, can leave skin feeling dry, irritated and itchy. The best way to prevent and treat skin problems in the winter is to moisturize.

The greasier the moisturizer, the better it replaces and locks in moisture, according to Dr. Hanifin. One of the best is petrolatum (e.g., petroleum jelly). "Petrolatum is good because it doesn't cause

allergies and it doesn't contain any chemicals," said Dr. Hanifin. In fact, he explained, it is the "gold standard" to treat skin problems from windburn to frostbite.

New moisturizing creams that mimic the skin's natural lipids, or fats, are now being developed, said Dr. Hanifin. These ceramide-containing creams may even heal the outer layer of the skin faster than petrolatum jelly.

When redness or itchiness occurs in addition to dryness, then an

anti-inflammatory treatment, such as a corticosteroid cream, may be helpful. Hydrocortisone cream works for the vast majority of people who have mild eczema, according to Dr. Hanifin. Windburn is a form of eczema that can be treated by using a hydrocortisone cream and/or a moisturizer for a few days. However, people with moderate to severe eczema need prescription strength steroid creams or ointments.

Steroid-containing creams tend to thin the skin with prolonged use. However, a new class of ointment (topical immunomodulators) safe for daily use is now available, said Dr. Hanifin. These may be used daily without the risk of skin thinning. In addition, oatmeal baths may relieve itchiness and sedating anti-histamine pills can reduce sleeplessness associated with itching.

**"The best way to treat dry winter skin is to prevent it."**

"Winter sun exposure is another

factor that affects skin," said Kevin Pinski, M.D., associate clinical professor of dermatology at Northwestern University in Chicago. "If you're skiing, for example, you're not only getting sun from the sky, you're getting it from the reflection off the snow," Dr. Pinski said. "It's just like being on the lake or near a pool and getting the reflection off the water."

When bathing or showering, use luke warm water, rather than hot. Limit showers to 10 minutes. Close the bathroom door to lock in the humidity. Because it takes approximately three minutes for the water to evaporate from the skin's outer layer, Dr. Hanifin recommends the "three-minute rule," that is, put on your moisturizer within three minutes of getting out of the shower or bath.



In general, avoid soaps with extra chemicals, including antibacterial, deodorant and perfumed soaps, all of which tend to be harsh to skin because they strip away natural oils. Soap-free cleansers are becoming a popular alternative, noted Dr. Pinski, M.D. "The best way to treat dry winter skin is to prevent it," Dr.

*Karen Wagner*

## TIPS FOR BETTER WINTER SKIN

- After washing hands, immediately apply hand cream to seal in moisture.
- Dab petroleum jelly on problem areas to seal in moisture and heal very dry skin.
- Use a lip balm with an SPF to help prevent chapped lips.
- Switch to a liquid fabric softener. Perfumes and chemicals from fabric sheets used in the dryer don't get rinsed out of clothing and may lead to skin irritation.
- Use a humidifier to keep humidity in the home higher during the winter.
- Use sunscreen year round that has sun protection factor (SPF) of at least 15 and offers broad spectrum (which provides protection from the sun's ultraviolet A and B rays). It should be applied 30 to 45 minutes prior to going outside.



# Curling the Hair Color blues



Feeling dissatisfied with your hair color is not just a modern day lament. It seems that people have been unhappy about their hair color since the times of the ancient Greeks, who lightened and reddened their hair to indicate honor and courage.



*Now when you get a little blue, you can dye your hair to match your mood.*

There are many options when it comes to coloring your hair. But, we also know more about the possible damaging effects that hair dyes, colors and bleaches may have — not only on the hair, but the skin, as well.

Essentially there are five types of dyes that range in degree of lasting color (see chart). Generally, the more permanent the color, the more potential harm the dye can cause.

To date, clinical studies have not shown that hair dyes cause cancer. Certain types of dyes, however, do cause allergic reactions in some people.

The most common type of hair coloring is permanent dye. The color is long lasting because the chemical reaction takes place inside the hair shaft, so the color can't get out, explained Marianne N. O'Donoghue, M.D., associate professor of dermatology at Rush Presbyterian-St. Lukes Medical Center in Chicago.

The permanent dyes are popular because they offer so many color options. Generally, however, it's easier to color your hair just a few shades lighter or darker than your natural shade because fewer chemicals are needed. And the chemicals, especially if used too often, can harm the hair, causing it to become dry or brittle.

"Each time you do the chemical procedure it's stressful for the hair," Dr. O'Donoghue said. That's why bleaching your hair, which is a two-step chemical process, is particularly harsh on the hair, Dr. O'Donoghue explained. During the first process, the color is taken out. This is the bleaching part.

"Then you have to do a second process where you put color back in," Dr. O'Donoghue continued. "So, people who have bleached blonde hair, basically are coloring their hair twice in the same day, and this makes the hair break."

Permanent dyes can also be harsh on the skin. Paraphenylenediamine (PPD) is a permanent dye that can cause some people to develop rashes or skin irritation. The rash can be severe and appear on the ears, back of the neck, the face and eyelids and, rarely, on the scalp. Itching may be moderate to severe. A recent report suggested reactions to PPD can occur after years of safe use.

"As soon as a person develops something like that and knows what it's from, they should immediately wash [the dye] out with a mild shampoo. Get rid of any residue," said Jerome Z. Litt, M.D., assistant professor of dermatology at Case Western Reserve University in Cleveland.

Dr. Litt said mild cases may also be treated with a cortisone-based liquid foam, spray or cream.

"The good news," Dr. O'Donoghue added, "is that because the hair dye is on the scalp for approximately 20 minutes, most people don't have adverse reactions to it."

**Semi-permanent** dyes are found in home coloring products and do not contain strong chemicals, and therefore can only be used for darkening.

"They'll make hair go brown, but they can't go blonde," said Dr. O'Donoghue. "This doesn't cause any harmful side effects, but after several shampoos, the hair color is washed out."

Dr. O'Donoghue said using semi-permanent dye is a good way for people to test various hair colors before they decide on a permanent color. Because the chemicals contained within them are not as potent as those in the permanent dyes, the semi-permanent dyes are less damaging to the hair.

**Henna** is another form of semi-permanent dye for highlighting hair that is seeing a resurgence in popularity. Original, pure henna (which comes from a plant) can cause pulmonary problems, such as asthma. Currently, however, beauticians use henna mixed with a semi-permanent dye, so it doesn't cause asthma or other allergic reactions.

One way to avoid possible skin irritation with strong dyes is to wear a cap on the scalp and then pull (through the small holes in the cap) the hair that is to be colored. Dr. O'Donoghue said this is a popular method of highlighting hair.

**Metallic** hair dyes use lead acetate to darken hair gradually, generally over a two-to-three-month period. These dyes are most

often used in men's hair coloring products. According to Dr. O'Donoghue, the chemicals don't actually penetrate through to the hair follicle, but lay on the outside of the cuticle, or hair shaft, which is why the hair of people who use this kind of hair coloring has a very dull appearance.

Moms (and dads) need not worry about the toxicity of the bright red, orange, blue, green and purple streaks that are appearing on the heads of their sons and daughters. These are the **temporary rinses** that are popular with teens today. The color washes out in one shampoo, and sometimes it even combs out.

"It causes no harm, whatsoever," Dr. O'Donoghue said.

Finally, **vegetable dyes** are just as temporary and harmless as the temporary rinses. These dyes, taken from plants, offer a limited color, however.

"The vegetable dyes just color the hair red, and after you shampoo it, it loses the red coloring," Dr. Litt explained.

In general, hair dye has to be "touched up" every four to six weeks to cover the roots. According to Dr. O'Donoghue, it's important that only the roots of the hair (the new growth) be colored because the rest of the hair has been around for a while, and has already been colored.

If the longer hair, which may be several years old, is chemically treated too often, it will become damaged and break.

"So you really have to be careful that you don't treat the hair where the right color is already there," Dr. O'Donoghue said. *Dj*

*Maureen Haggerty*

## 5 common hair dyes

### Permanent

Color lasts the longest; best variety of color options; roots have to be touched up periodically; possible side effects include rash, skin irritation, itching, and can be severe.

### Semi-Permanent

Color washes out after several shampoos; chemicals less damaging to hair than permanent dye; may produce mild allergic reactions.

### Metallic

Color change takes place gradually (hair darkens); leaves hair with dull appearance, not harmful to hair (but toxic if ingested).

### Temporary Rinse

Color washes out after one shampoo; offers fad colors-red, blue, green, purple, etc; not harmful.

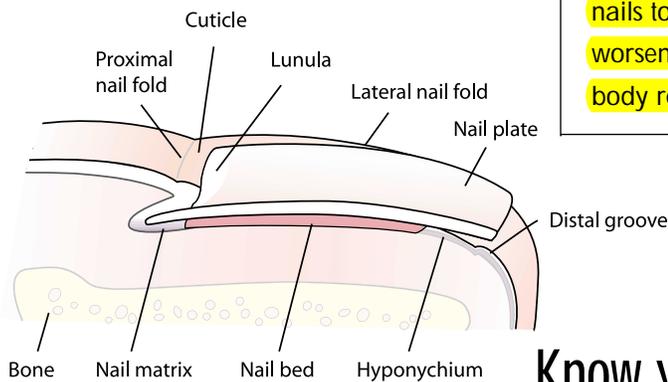
### Vegetable

Color fades after one shampoo; limited color options (usually just red); not harmful

# What lies beneath your artificial nails?

Artificial nails come in many shapes and sizes. Acrylic, sculptured, photo-bonded, and press-on nails can put sophistication or whimsy at your fingertips. These products enhance the appearance of normal nails and camouflage nails that are brittle, damaged, or unattractive. But, these fashion accessories, which dermatologists call *nail prostheses*, may be hazardous to your health.

"There are more problems — particularly with sculptured and acrylic nails — than most people realize," said Nia Katechis Terezakis, M.D., a clinical professor of dermatology at Tulane and Louisiana State medical schools in New Orleans. "Local allergic reactions can occur at or near nails. Ectopic reactions, most common in ears and on the eyelids, face, and neck, can develop on any part of the body the nails touch. Chemicals used to apply them can act as an irritant focus, worsening any existing rash, and some patients develop painful total-body reactions."



## Know your nail

A nail bed is not something a swami sleeps on; distal groove is not the name of a rap group and nail matrix is not the next Keanu Reeves movie. It helps to know what your dermatologist is talking about when he consults with you. Your dermatologist can explain the function of any of these parts and how they can be infected by skin and nail afflictions; but this graphic illustrates some common terms that you can keep at your fingertips.

## Watch Out For Dangerous Chemicals

A prime source of fungal nail infections, deformities, and other abnormalities associated with artificial nails is MMA (methyl methacrylate). This chemical bonding agent has been described as *poisonous* by the U.S. Food and Drug Administration (FDA) and its use is restricted in more than 30 states.

Signs of this prohibited substance include a strong, unfamiliar odor and nails that are very hard, difficult to shape, and won't soak off in acrylic-dissolving solutions.

If you suspect your salon is using MMA, contact your state cosmetology board or the FDA.

## Be Nail Aware

"Anyone who wears artificial nails should be alert to signs of infection and

allergic reactions," said Wilma F. Bergfeld, M.D., director of clinical research in the Cleveland Foundation Clinic's Department of Dermatology. "It can take fingernails as long as six months to recover, so it's important to seek medical attention."

Bumping or injuring your finger can create an environment that invites nail infection. Wearing artificial nails for a long time can have the same effect, and many people are disappointed to discover that their own nails are broken, thin, and discolored when their nail enhancements are removed.

## Tattoo Parlors Connected to Hepatitis C Epidemic

**A** recent study by the University of Texas Southwestern Medical Center suggested that people with commercially acquired tattoos were six times more likely to have hepatitis C virus (HCV), than those without them. Twenty-two percent of the study's participants who had tattoos were infected, compared to only 3.5 percent in patients who did not have tattoos. People who have larger, more artistically refined tattoos or who have multiple tattoos are even more at risk. For example, people with red, yellow, and white tattoos have a 50 percent likelihood of infection, the study found.

More than 600 patients participated in the study. Each participant was interviewed during their regular medical exam about all known risk factors for contracting hepatitis C, and then tested for the virus.

The results of the study suggest that commercial tattooing may be the "missing risk" factor in the spread of HCV. Previous studies have identified

intravenous drug use, health care related occupation, and heavy beer drinking as major risk factors, but failed to identify risk factors responsible for at least 40 percent of infections.

The study attributes the spread of HCV in tattoo parlors to their "assembly-line nature," which may encourage transmission from customer to customer. In addition, infection control practices are almost completely unregulated. Only one-third of all states have any kind of regulations for tattoo parlors, but these regulations are not enforced, which means sterilization is left completely up to each tattoo parlor.

"When you go to a tattoo parlor, you would expect that somebody is coming in and checking that they're sterilizing needles and cleaning equipment, but in reality, nobody is checking," said Robert Haley, M.D., co-author of the study. "As far as I know, Texas is the only state that

inspects tattoo parlors, even though hepatitis C can give you a fatal disease that can cut your life short by 20 or 30 years."

At least 3 percent of all whites and Hispanics and 6 percent of all African Americans between the ages of 30 and 50 are chronically infected with hepatitis C, which puts them at risk for cirrhosis and liver cancer. Many people are unaware that they are infected with the virus. A "silent killer," hepatitis C often goes undetected in the blood for years.

"We're in the midst of a very serious risk of Hepatitis C in this country," Dr. Haley said, "and tattoo parlors appear to be a major route by which this is occurring."

Dr. Haley recommends that everyone who has a tattoo should see a doctor afterwards to get a blood test, so that treatment for HCV or any other related complications can begin immediately. **Dj**

*Kevin Orfield*



## Sun Damages Skin, Despite Color

**I**n France, the largest study ever conducted on photoaging revealed two unexpected results. Men with dark skin showed more severe photodamage than men with fair skin, and people living in the sunny South of France were actually less likely to have photodamaged skin than those living in the North. The study analyzed over 3,000 women and 3,600 men, ages 45 to 60.

A key risk factor contributing to sun-induced aging is age. The study revealed that 22 percent of women and 17 percent of men age 45 to 49 showed visible signs of photoaging ranging from moderate to very severe. This percentage increased among men and women as they advanced in age.

According to the study, people with higher skin phototypes were less likely to have moderate to severe photoaging than people with lower phototypes (darker skin), with one exception. Men with very dark skin have a three-times higher risk for showing moderate to extreme photoaging

than men with lighter skin.

"We can only speculate that this is due to behavior; that these men fail to protect themselves or have greater exposure to the sun," said Erwin Tschachler, M.D., professor of dermatology, University of Vienna, and Director of CE.R.I.E.S, which conducted the study. "But one thing is certain. Even if you have extremely pigmented skin, you are not completely protected from the danger of photodamage."

Behavior appears to be an important risk factor related to photodamage. It might seem logical that people living in southern latitudes would experience higher levels of photodamage than people living in the north. But the study found that people in the south are actually 20 to 30 percent less likely to show signs of photoaging.

Dr. Tschachler said that "People in the south are more aware of the sun's intensity and behave differently," he explained.

"They avoid going out into the sun, while people in the foggy north go out in the sun whenever it's out. It's quite an interesting finding and suggests that sun protective behavior really can reduce your risk of photoaging."

Protection from the sun's ultraviolet (UVA and UVB) rays reduces the risk, not only of premature photoaging, but also several forms of skin cancer. People planning to be in the sun for more than 20 minutes should apply a broad spectrum sunscreen (one that protects against UVA and UVB rays) with a minimum skin protection factor (SPF) of 15, and reapply it as often as necessary should it be rubbed or washed off. "Sun is the single most harmful agent when it comes to the effect on our skin and premature aging," said Dr. Tschachler. "The good news is that the damage is avoidable." **Dj**

*Kevin Orfield*