

# DERMATOLOGY

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



## insights

Volume 4, Number 1

### A Closer Look Pediatric Skin, Hair & Nail Care

Sun Savvy Tips for Children of All Ages

What Parents Should Know About Birthmarks

Rash Decisions

Help Children Take Control of Psoriasis

**Childhood hair shedding**  
Should you be concerned?

**Skin care for moms**  
Cosmetic care during and after pregnancy

**Beware of poison plants**  
Poison ivy, oak and sumac

**Care for little nails**  
A child's nails need attention too!



**PLUS:**

**Jerry Mathers**  
Television's Leave it to Beaver  
star's battle with psoriasis.

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*See your dermatologist.*



You only get one skin. Trust it to the highly trained dermatologists who display this shield. See [aad.org](http://aad.org).



**Pediatric Skin Care**

This issue of *Dermatology Insights* focuses on pediatric dermatology — an exciting and expanding field within dermatology. Over the past several years, exciting innovations in the treatment of pediatric skin disease have come forward and our members are at the forefront of the care of pediatric dermatology problems. Pediatric dermatologists care for large numbers of children with skin disease ranging from minor common conditions to major debilitating skin diseases.

This issue will give you more insight into the range of services provided by dermatologists in the field of pediatric dermatology in the care of skin, hair and nails.

Additionally, you'll find our regular features on skin, hair and nails in this issue, as well as patient news and the latest in dermatology research.

I hope you enjoy this issue.

Raymond L. Cornelison Jr., M.D.  
 President  
*American Academy of Dermatology*

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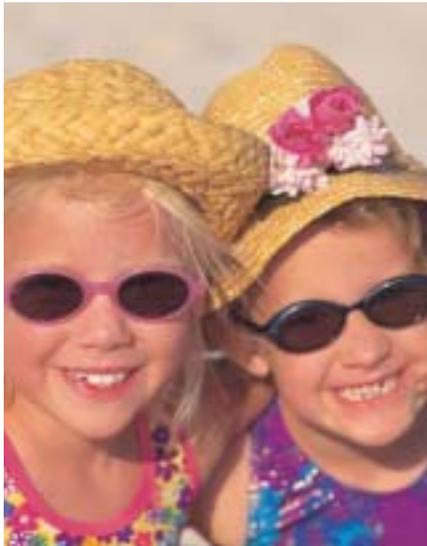
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*The American Academy of Dermatology is the largest and most representative of all dermatologic associations. The Academy is committed to advancing the science and art of medicine and surgery related to the skin; advocating quality dermatological care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

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# The first step to clearing up your psoriasis is clearing up any questions you may have.

With clear answers and a comprehensive array of services to help you live and deal with psoriasis, PsoriasisSupport can be your most trusted asset in the quest for clearer skin.

**PsoriasisSupport.com** will keep you up-to-date on the latest psoriasis news and information. In addition, medical experts will be online to answer questions about your condition. And by interacting with other people just like yourself through our message boards, you can learn useful tips on how they deal with their psoriasis.

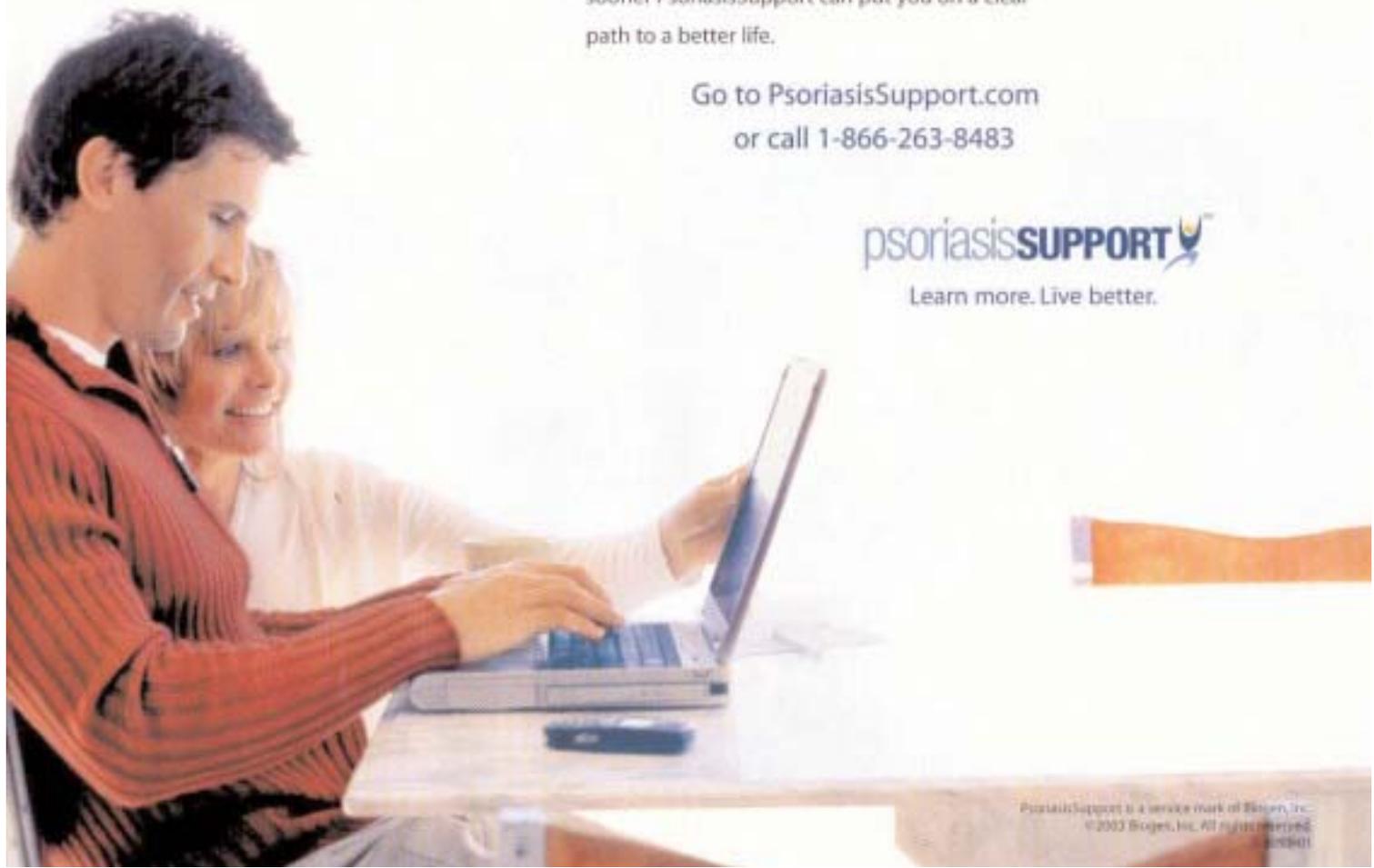
You can also call **866-263-8483** and speak with a PsoriasisSupport specialist who can answer questions you may have about your condition. You may want to ask about new psoriasis treatment options as well.

Call or log on today. The sooner you do, the sooner PsoriasisSupport can put you on a clear path to a better life.

Go to [PsoriasisSupport.com](http://PsoriasisSupport.com)  
or call 1-866-263-8483

psoriasis**SUPPORT** 

Learn more. Live better.



# A CLOSER LOOK AT: PEDIATRIC SKI



# N, HAIR & NAIL CARE

It used to be that the greatest threat found in children's playgrounds was falling and scraping your knees. Today's threat seems far more innocuous. It's warm and it's welcoming, but it's the primary cause of skin cancer, including the potentially deadly malignant melanoma.

## ***Today's threat is the sun.***

Because children spend a lot of time outdoors they get an average of three times more sun exposure than adults. According to estimates by the American Academy of Dermatology (AAD), children get 80 percent of their total lifetime sun exposure by the time they turn 18. Consequently, a child born in 2003 has a one in five risk of developing skin cancer.

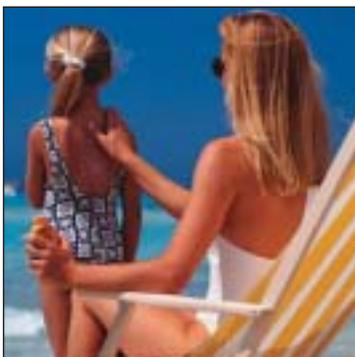
Parents' preventative measures are their children's best defense. The earlier parents incorporate sun protection into their children's daily activities, the lower their lifetime risk will be for developing skin cancer, including melanoma.

## *children need sun protection too!*

Even one or two blistering sunburns can significantly increase a child's risk for developing melanoma/skin cancer later in life. Don't think your child can't get burned. Even dark-skinned children can get a sunburn. Any child not practicing sun safety measures increases his or her risk of skin cancer and premature aging.

Dermatologists recommend that children and adults limit outdoor activities between 10 a.m. and 4 p.m., when the sun's rays are strongest. It is important to also wear sunscreen, because there is reflective light even in the shade.

Babies under six months old should spend very little time in the sun. If they must be out in the sun, they should be clothed in protective clothing, including a hat with a brim that shades their face and sunglasses



that filter harmful ultraviolet rays.

Babies and children over six months should always wear a broad-spectrum sunscreen with an SPF (sun protection factor) of at least 15. Research indicates that regular use of sunblock with an SPF of 15 or higher during the first 18 years of life can lower the risk of certain skin cancers by 78 percent (parents should check with their pediatrician or dermatologist before using sunblock on a child under six months of age.) Sunscreen should be applied 30 minutes before children go outside and reapplied every two to three hours when they are in the sun or water, even if the label says the product is waterproof.

Don't forget the nose, lips, ears and backs of hands and feet! If you or your child has fair skin, light colored

eyes and hair, freckles, or spends a lot of time outside, consider using an SPF 30 or higher.

Kids should wear photoprotective clothing and hats.

Just wearing a white t-shirt isn't good enough. When wet, a light-colored shirt transmits almost as much light to a child as his or her bare skin! So wear dark colors with long sleeves and pants whenever possible. Some companies specialize in designing photoprotective clothing, and laundry additives that increase the SPF of clothing are also available. Your dermatologist can recommend an appropriate brand.

For maximum protection, children should also wear wide-brimmed hats, long-sleeved t-shirts and sunglasses, and avoid the mid-day sun. **Di**





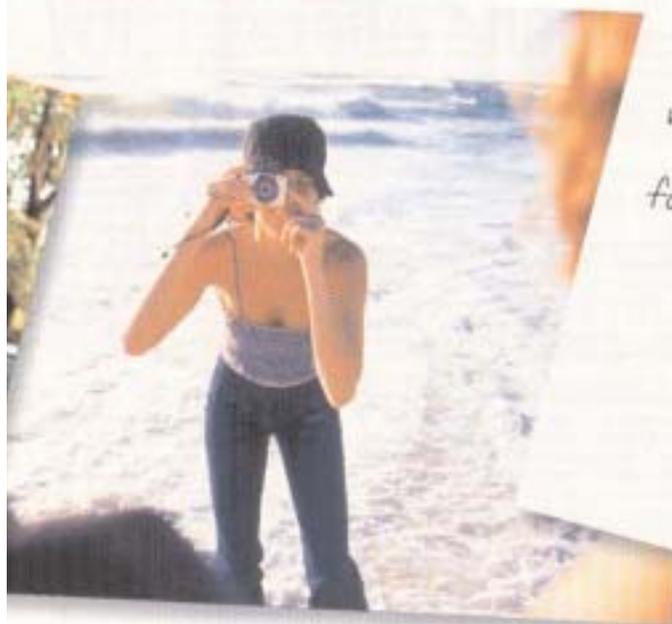
Leave psoriasis behind .....

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**NEW**  
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Less time treating. A lot more living.

Please see brief  
summary on back.



"My Amevive experience  
was great - I almost  
forgot I had psoriasis."

- Mike J.  
Portland, OR



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for months at a time.

## Introducing AMEVIVE®

A new psoriasis treatment that can provide months of relief.

That extended vacation away from psoriasis, not to mention its treatment, could be yours. Imagine the possibility of getting months of relief from 12 once-a-week treatments. Because AMEVIVE works below the surface of the skin, it treats one of the causes — not just the symptoms. And with PsoriasisSupport, you can get free insurance assistance and a coordinator to guide you through the treatment process.

### Important Safety Information

AMEVIVE is indicated for adults with moderate to severe chronic plaque psoriasis who are

candidates for phototherapy or systemic therapy.

Commonly observed adverse events that occurred in clinical studies more frequently with AMEVIVE included: sore throat, dizziness, increased cough, nausea, itching, muscle aches, chills, injection site pain, injection site inflammation and accidental injury.

AMEVIVE must be administered under the supervision of a physician.

AMEVIVE reduces lymphocyte counts (also called T cells). T cell levels should be measured weekly during the 12-week dosing period.

AMEVIVE reduces immune cell counts which could increase your chance of developing infection or malignancy, which you should discuss with your doctor. If you develop a malignancy or any signs of infection while undergoing a course of treatment with AMEVIVE, you should notify your doctor.

AMEVIVE should not be taken if you are known to be allergic to AMEVIVE or any of its components.

If you become pregnant while you are receiving AMEVIVE or within 8 weeks of finishing AMEVIVE, notify your doctor and consider enrolling in the Pregnancy Registry by calling 1-866-AMEVIVE.

Visit your dermatologist soon to see if AMEVIVE is right for you.  
For more details, call **1-866-AMEVIVE** or visit **www.AMEVIVE.com**.

# Amevive<sup>®</sup>

(alefacept)

## Brief Summary of Prescribing Information

**INDICATIONS AND USAGE:** AMEVIVE<sup>®</sup> is indicated for the treatment of adult patients with moderate to severe chronic plaque psoriasis who are candidates for systemic therapy or phototherapy.

**CONTRAINDICATIONS:** AMEVIVE<sup>®</sup> should not be administered to patients with known hypersensitivity to AMEVIVE<sup>®</sup> or any of its components.

**WARNINGS: LYMPHOPENIA. AMEVIVE<sup>®</sup> INDUCES DOSE-DEPENDENT REDUCTIONS IN CIRCULATING CD4+ AND CD8+ T LYMPHOCYTE COUNTS.**

**A COURSE OF AMEVIVE<sup>®</sup> THERAPY SHOULD NOT BE INITIATED IN PATIENTS WITH A CD4+ T LYMPHOCYTE COUNT BELOW NORMAL. THE CD4+ T LYMPHOCYTE COUNT OF PATIENTS RECEIVING AMEVIVE<sup>®</sup> SHOULD BE MONITORED WEEKLY THROUGHOUT THE COURSE OF THE 12-WEEK DOSING REGIMEN. DOSING SHOULD BE WITHHELD IF CD4+ T LYMPHOCYTE COUNTS ARE BELOW 250 CELLS/ $\mu$ L. THE DRUG SHOULD BE DISCONTINUED IF THE COUNTS REMAIN BELOW 250 CELLS/ $\mu$ L FOR ONE MONTH (SEE DOSAGE AND ADMINISTRATION).**

**Malignancies:** AMEVIVE<sup>®</sup> may increase the risk of malignancies. Some patients who received AMEVIVE<sup>®</sup> in clinical studies developed malignancies (see **ADVERSE REACTIONS, Malignancies**). In preclinical studies, animals developed B-cell hyperplasia, and one animal developed a lymphoma (see **PRECAUTIONS, Carcinogenesis, Mutagenesis, and Fertility**). AMEVIVE<sup>®</sup> should not be administered to patients with a history of systemic malignancy. Caution should be exercised when considering the use of AMEVIVE<sup>®</sup> in patients at high risk for malignancy. If a patient develops a malignancy, AMEVIVE<sup>®</sup> should be discontinued.

**Serious Infections:** AMEVIVE<sup>®</sup> is an immunosuppressive agent and, therefore, has the potential to increase the risk of infection and reactivate latent, chronic infections. AMEVIVE<sup>®</sup> should not be administered to patients with a clinically important infection. Caution should be exercised when considering the use of AMEVIVE<sup>®</sup> in patients with chronic infections or a history of recurrent infection. Patients should be monitored for signs and symptoms of infection during or after a course of AMEVIVE<sup>®</sup>. New infections should be closely monitored. If a patient develops a serious infection, AMEVIVE<sup>®</sup> should be discontinued (see **ADVERSE REACTIONS, Infections**).

**PRECAUTIONS: Effects on the Immune System:** Patients receiving other immunosuppressive agents or phototherapy should not receive concurrent therapy with AMEVIVE<sup>®</sup> because of the possibility of excessive immunosuppression. The duration of the period following treatment with AMEVIVE<sup>®</sup> before one should consider starting other immunosuppressive therapy has not been evaluated.

The safety and efficacy of vaccines, specifically live or live-attenuated vaccines, administered to patients being treated with AMEVIVE<sup>®</sup> have not been studied. In a study of 40 patients with chronic plaque psoriasis, the ability to mount immunity to tetanus toxoid (recall antigen) and an experimental neo-antigen was preserved in those patients undergoing AMEVIVE<sup>®</sup> therapy.

**Allergic Reactions:** Hypersensitivity reactions (urticaria, angioedema) were associated with the administration of AMEVIVE<sup>®</sup>. If an anaphylactic reaction or other serious allergic reaction occurs, administration of AMEVIVE<sup>®</sup> should be discontinued immediately and appropriate therapy initiated.

**Information for Patients:** Patients should be informed of the need for regular monitoring of white blood cell (lymphocyte) counts during therapy and that AMEVIVE<sup>®</sup> must be administered under the supervision of a physician. Patients should also be informed that AMEVIVE<sup>®</sup> reduces lymphocyte counts, which could increase their chances of developing an infection or a malignancy. Patients should be advised to inform their physician promptly if they develop any signs of an infection or malignancy while undergoing a course of treatment with AMEVIVE<sup>®</sup>.

Female patients should also be advised to notify their physician if they become pregnant while taking AMEVIVE<sup>®</sup> (or within 8 weeks of discontinuing AMEVIVE<sup>®</sup>) and be advised of the existence of and encouraged to enroll in the Pregnancy Registry. Call 1-866-AMEVIVE (1-866-263-8463) to enroll into the Registry (see **PRECAUTIONS, Pregnancy**).

**Laboratory Tests:** CD4+ T lymphocyte counts should be monitored weekly during the 12-week dosing period and used to guide dosing. Patients should have normal CD4+ T lymphocyte counts prior to an initial or a subsequent course of treatment with AMEVIVE<sup>®</sup>. Dosing should be withheld if CD4+ T lymphocyte counts are below 250 cells/ $\mu$ L. AMEVIVE<sup>®</sup> should be discontinued if CD4+ T lymphocyte counts remain below 250 cells/ $\mu$ L for one month.

**Drug Interactions:** No formal interaction studies have been performed. The duration of the period following treatment with AMEVIVE<sup>®</sup> before one should consider starting other immunosuppressive therapy has not been evaluated.

**Carcinogenesis, Mutagenesis, and Fertility:** In a chronic toxicity study, cynomolgus monkeys were dosed weekly for 52 weeks with intravenous alefacept at 1 mg/kg/dose or 20 mg/kg/dose. One animal in the high dose group developed a B-cell lymphoma that was detected after 26 weeks of dosing. Additional animals in both dose groups developed B-cell hyperplasia of the spleen and lymph nodes.

All animals in the study were positive for an endemic primate gammaherpes virus also known as lymphocryptovirus (LCV). Latent LCV infection is generally asymptomatic, but can lead to B-cell lymphomas when animals are immune suppressed.

In a separate study, baboons given 3 doses of alefacept at 1 mg/kg every 8 weeks were found to have centralized proliferation in B-cell dependent areas in the germinal centers of the spleen following a 116-day washout period.

The role of AMEVIVE<sup>®</sup> in the development of the lymphoid malignancy and the hyperplasia observed in non-human primates and the relevance to humans is unknown. Immunosuppression-associated lymphocyte disorders (plasmacytic hyperplasia, polymorphic proliferation, and B-cell lymphomas) occur in patients who have congenital or acquired immunodeficiencies including those resulting from immunosuppressive therapy.

No carcinogenicity or fertility studies were conducted.

Mutagenicity studies were conducted *in vitro* and *in vivo*; no evidence of mutagenicity was observed.

**Pregnancy (Category B):** Women of childbearing potential make up a considerable segment of the patient population affected by psoriasis. Since the effect of AMEVIVE<sup>®</sup> on pregnancy and fetal development, including immune system development, is not known, health care providers are encouraged to enroll patients currently taking AMEVIVE<sup>®</sup> who become pregnant into the Biogen Pregnancy Registry by calling 1-866-AMEVIVE (1-866-263-8463).

Reproductive toxicology studies have been performed in cynomolgus monkeys at doses up to 5 mg/kg/week (about 62 times the human dose based on body weight) and have revealed no evidence of impaired fertility or harm to the fetus due to AMEVIVE<sup>®</sup>. No abortifacient or teratogenic effects were observed in cynomolgus monkeys following intravenous bolus injections of AMEVIVE<sup>®</sup> administered weekly during the period of organogenesis to gestation. AMEVIVE<sup>®</sup> underwent trans-placental passage and produced an utero exposure in the developing monkeys. In utero, serum levels of exposure in these monkeys were 23% of maternal serum levels. No evidence of fetal toxicity including adverse effects on immune system development was observed in any of these animals.

Animal reproduction studies, however, are not always predictive of human response and there are no adequate and well-controlled studies in pregnant women. Because the risk to the development of the fetal immune system and postnatal immune function in humans is unknown, AMEVIVE<sup>®</sup> should be used during pregnancy only if clearly needed. If pregnancy occurs while taking AMEVIVE<sup>®</sup>, continued use of the drug should be assessed.

**Nursing Mothers:** It is not known whether AMEVIVE<sup>®</sup> is excreted in human milk. Because many drugs are excreted in human milk, and because there exists the potential for serious adverse reactions in nursing infants from AMEVIVE<sup>®</sup>, a decision should be made whether to discontinue nursing while taking the drug or to discontinue the use of the drug, taking into account the importance of the drug to the mother.

**Geriatric Use:** Of the 1357 patients who received AMEVIVE<sup>®</sup> in clinical trials, a total of 100 patients were  $\geq$  65 years of age and 13 patients were  $>$  75 years of age. No differences in safety or efficacy were observed between older and younger patients, but there were not sufficient data to exclude important differences. Because the incidence of infections and certain malignancies is higher in the elderly population, in general, caution should be used in treating the elderly.

**Pediatric Use:** The safety and efficacy of AMEVIVE<sup>®</sup> in pediatric patients have not been studied. AMEVIVE<sup>®</sup> is not indicated for pediatric patients.

**ADVERSE REACTIONS:** The most serious adverse reactions were:

- Lymphopenia (see **WARNINGS**);
- Malignancies (see **WARNINGS**);
- Serious Infections requiring hospitalization (see **WARNINGS**);
- Hypersensitivity Reactions (see **PRECAUTIONS, Allergic Reactions**).

Commonly observed adverse events seen in the first course of placebo-controlled clinical trials with at least a 2% higher incidence in the AMEVIVE<sup>®</sup> treated patients compared to placebo-treated patients were: pharyngitis, dizziness, increased cough, nausea, pruritus, myalgia, chills, injection site pain, injection site inflammation, and accidental injury. The only adverse event that occurred at a 5% or higher incidence among AMEVIVE<sup>®</sup> treated patients compared to placebo-treated patients was chills (1% placebo vs. 6% AMEVIVE<sup>®</sup>), which occurred predominantly with intravenous administration.

The adverse reactions which most commonly resulted in clinical intervention were cardiovascular events including coronary artery disorder in <1% of patients and myocardial infarct in <1% of patients. These events were not observed in any of the 473 placebo-treated patients. The total number of patients hospitalized for cardiovascular events in the AMEVIVE<sup>®</sup> treated group was 1.2% (11/920).

The most common events resulting in discontinuation of treatment with AMEVIVE<sup>®</sup> were CD4+ T lymphocyte levels below 250 cells/ $\mu$ L (see **WARNINGS** and **ADVERSE REACTIONS, Effect on Lymphocyte Counts**), headache (0.2%), and nausea (0.2%).

Because clinical trials are conducted under widely varying conditions, adverse event 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. The adverse reaction information does, however, provide a basis for identifying the adverse events that appear to be related to drug use and a basis for approximating rates.

The data described below reflect exposure to AMEVIVE<sup>®</sup> in a total of 1357 psoriasis patients, 65% of whom received 1 to 2 courses of therapy and the rest received 3 to 6 courses and were followed for up to three years. Of the 1357 total patients, 67% received their first course in placebo-controlled studies. The population studied ranged in age from 16 to 84 years, and included 69% men and 31% women. The patients were mostly Caucasian (89%), reflecting the

general psoriasis population. Disease severity at baseline was moderate to severe psoriasis.

**Effect on Lymphocyte Counts:** In the intramuscular study (Study 2), 4% of patients temporarily discontinued treatment and no patients permanently discontinued treatment due to CD4+ T lymphocyte counts below the specified threshold of 250 cells/ $\mu$ L. In Study 2, 10%, 28%, and 42% of patients had total lymphocyte CD4+ and CD8+ T lymphocyte counts below normal, respectively. Twelve weeks after a course of therapy (12 weekly doses), 2%, 8%, and 21% of patients had total lymphocyte, CD4+ and CD8+ T cell counts below normal.

In the first course of the intravenous study (Study 1), 10% of patients temporarily discontinued treatment and 2% permanently discontinued treatment due to CD4+ T lymphocyte counts below the specified threshold of 250 cells/ $\mu$ L. During the first course of Study 1, 22% of patients had total lymphocyte counts below normal, 48% had CD4+ T lymphocyte counts below normal and 59% had CD8+ T lymphocyte counts below normal. The maximal effect on lymphocytes was observed within 6 to 8 weeks of initiation of treatment. Twelve weeks after a course of therapy (12 weekly doses), 4% of patients had total lymphocyte counts below normal, 19% had CD4+ T lymphocyte counts below normal, and 38% had CD8+ T lymphocyte counts below normal.

For patients receiving a second course of AMEVIVE<sup>®</sup> in Study 1, 17% of patients had total lymphocyte counts below normal, 44% had CD4+ T lymphocyte counts below normal, and 58% had CD8+ T lymphocyte counts below normal. Twelve weeks after completing dosing, 3% of patients had total lymphocyte counts below normal, 17% had CD4+ T lymphocyte counts below normal, and 35% had CD8+ T lymphocyte counts below normal (see **WARNINGS** and **PRECAUTIONS, Laboratory Tests**).

**Malignancies:** In the 24-week period constituting the first course of placebo-controlled studies, 13 malignancies were diagnosed in 11 AMEVIVE<sup>®</sup>-treated patients. The incidence of malignancies was 1.3% (11/870) for AMEVIVE<sup>®</sup>-treated patients compared to 0.5% (2/413) in the placebo group.

Among 1357 patients who received AMEVIVE<sup>®</sup>, 25 patients were diagnosed with 35 treatment-emergent malignancies. The majority of these malignancies (23 cases) were basal (8) or squamous cell cancers (17) of the skin. Three cases of lymphoma were observed; one was classified as non-Hodgkin's follicle-center cell lymphoma and two were classified as Hodgkin's disease.

**Infections:** In the 24-week period constituting the first course of placebo-controlled studies, serious infections (infections requiring hospitalization) were seen at a rate of 0.9% (8/920) in AMEVIVE<sup>®</sup>-treated patients and 0.2% (1/413) in the placebo group. In patients receiving repeated courses of AMEVIVE<sup>®</sup> therapy, the rates of serious infections were 0.7% (5/756) and 1.5% (3/198) in the second and third course of therapy, respectively. Serious infections among 1357 AMEVIVE<sup>®</sup>-treated patients included reoccurring cellulitis, periorbital abscess, post-operative and burn wound infection, toxic shock, pneumonia, appendicitis, pre-septal cellulitis, cheylecythia, gastroenteritis and herpes simplex infection.

**Hypersensitivity Reactions:** In clinical studies two patients were reported to experience angioedema, one of whom was hospitalized. In the 24-week period constituting the first course of placebo-controlled studies, urticaria was reported in 6 (<1%) AMEVIVE<sup>®</sup>-treated patients vs. 1 patient in the control group. Urticaria resulted in discontinuation of therapy in one of the AMEVIVE<sup>®</sup>-treated patients.

**Injection Site Reactions:** In the intramuscular study (Study 2), 18% of AMEVIVE<sup>®</sup>-treated patients and 8% of placebo-treated patients reported injection site reactions. Reactions at the site of injection were generally mild, typically occurred on single occasions, and included either pain (7%), inflammation (4%), bleeding (4%), edema (2%), non-specific reaction (2%), mass (1%), or skin hypersensitivity (<1%). In the clinical trials, a single case of injection site reaction led to the discontinuation of AMEVIVE<sup>®</sup>.

**Immunogenicity:** Approximately 3% (35/1306) of patients receiving AMEVIVE<sup>®</sup> developed low-titer antibodies to alefacept. No apparent correlation of antibody development and clinical response or adverse events was observed. The long-term immunogenicity of AMEVIVE<sup>®</sup> is unknown.

The data reflect the percentage of patients whose test results were considered positive for antibodies to alefacept in an ELISA assay and are highly dependent on the sensitivity and specificity of the assay. Additionally, the observed incidence of antibody positivity in an assay may be influenced by several factors including sample handling, timing of sample collection, concomitant medications, and underlying disease. For these reasons, comparison of the incidence of antibodies to alefacept with the incidence of antibodies to other products may be misleading.

**Other Observed Adverse Reactions from Clinical Trials:** Less common events that were observed at a higher rate in AMEVIVE<sup>®</sup>-treated patients include rare cases (0) of transaminase elevations to 5 to 10 times the upper limit of normal.

**OVERDOSAGE:** The highest dose tested in humans (0.75 mg/kg IV) was associated with chills, headache, arthralgia, and serositis within one day of dosing. Patients who have been inadvertently administered an excess of the recommended dose should be closely monitored for effects on total lymphocyte count and CD4+ T lymphocyte count.

Issued February 2003  
AMEVIVE<sup>®</sup> (alefacept)

Manufactured by  
BIODEN, INC.  
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Cambridge, MA 02142 USA  
1-866-263-8463

83307-1 Brief Summary

**BIODEN**<sup>®</sup>

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2003 2-3104-01

# What Parents Should *know about* Birthmarks

**B**irthmarks are areas of flat or raised discolored skin that are often seen on the body at birth or may develop shortly after birth. While folktales claim various reasons for these blemishes, the exact causes of birthmarks are unknown. However, most birthmarks are not inherited and are not caused by anything that happens to the mother during pregnancy.

They vary in color and may be brown, tan, or black to blue, pink or red. Some birthmarks are only stains on the surface of the skin, while others extend into the tissues under the skin or grow above the surface.

“Some birthmarks grow with the child and change little in color throughout a lifetime, while others fade or darken in time,” said Sarah Chamlin, M.D., assistant professor of pediatrics and dermatology at Children's Memorial Hospital in Chicago.

Birthmarks are most often harmless; however, Dr. Chamlin said some troublesome birthmarks may require treatment.

Most birthmarks can be identified as either pigmented/brown lesions or vascular lesions.



## PIGMENTED BIRTHMARKS

Birthmarks that are flat but colorful include congenital nevi (commonly known as a mole), café-au-lait spots and Mongolian spots.

**Congenital Nevi** are typically present at birth, brown or black in color, vary in size and location and can be either raised or flat. These common birthmarks most often require no treatment.

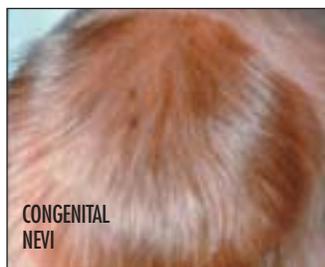
“Nevi with irregular color or borders, a nodular surface or bleeding should be evaluated by a dermatologist,” said Dr. Chamlin. “Large nevi, particularly on the midline of the back or scalp, should also be evaluated.”

Dr. Chamlin adds that surgical removal may be necessary for atypical appearing nevi due to a potential risk of skin cancer.

**Café-au-lait spots** are tan or light brown patches that are the result of too much pigment in the skin. These discolorations can sometimes appear in multiples, and about 10-20 percent of children and adults have one.

Café-au-lait spots may fade over a lifetime, but do not usually go away. A single spot is not typically serious, but numerous spots may suggest other health problems and a dermatologist should be consulted.

**Mongolian spots** are flat, gray-blue discolorations found on the back or buttocks of babies, and are commonly found in newborns with dark skin. Although they may never go away altogether, Mongolian spots usually disappear by school age without treatment.



## VASCULAR BIRTHMARKS

**Vascular lesions** are the result of an increase in the number of blood vessels in the skin. The most common types of vascular birthmarks are salmon patches, hemangiomas and port wine stains.

**Salmon patches (nevus simplex)** are the most frequently diagnosed vascular birthmark. They are flat, mild red or pink and are sometimes called “angel’s kisses” when they appear on the forehead, eyelids, nose or upper lip and “stork bites” when they are found on the back of the neck. Angel’s kisses most often go away by age 1-2, but stork bites may last into adulthood. They are typically harmless and require no treatment.

**Hemangiomas** are a benign growth of blood vessels, and occur in as many as one out of 10 infants. They can be divided into two types: superficial (formerly referred to as strawberry hemangiomas) and deep (formerly referred to as cavernous hemangiomas).

Superficial hemangiomas are raised and bright red because the abnormal blood vessels are very close to the skin’s surface. Deep hemangiomas have a bluish-purple color because the abnormal vessels are deeper under the skin.

“[Deep hemangiomas] are most often not present at birth but slowly enlarge during the



first six to nine months of life,” said Dr. Chamlin. “They subsequently slowly resolve (improve in appearance) over several years.”

After the first year, most hemangiomas stop growing. According to Dr. Chamlin, approximately 50 percent of hemangiomas resolve by age five, and 90 percent are flat by age nine. Texture change or superficial blood vessels may remain on the skin even after complete resolution.

The most commonly utilized treatments for hemangiomas include close observation, corticosteroids, and wound care when a lesion is ulcerated.

“When hemangiomas grow in locations that can threaten vision, damage cartilage around the nose or ear or cause significant facial deformity, it is often necessary to treat the patient with oral steroids,” said Dr. Chamlin.

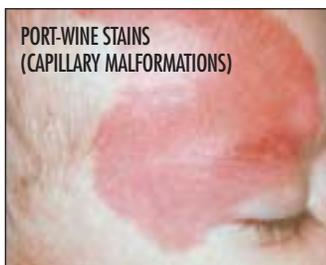
Pulse-dye laser treatment may also be used to treat hemangiomas after or during involution (shrinking stage), but are only helpful for superficial hemangiomas. Hemangiomas with sores that will not heal may also benefit from the treatment of lasers.

“Surgery is sometimes performed during or after involution if a hemangioma leaves excess skin or tissue behind,” said Dr. Chamlin. “Surgical removal is rarely performed on hemangiomas when they are actively growing.”

*Port-wine stains (capillary malformations)* appear at birth in approximately three out of every 1,000 infants. They are flat, pink, red or purplish discolorations often found on the face, but can be present anywhere on the body. Unlike other birthmarks, port-wine stains grown proportionally as the child grows. While their texture and shade may change, they are permanent without treatment.

Specially designed cover-up makeup can be used to reduce the appearance of port-wine stains.

“The stain may also be lightened with pulsed-dye laser treatment,” said Dr. Chamlin. “Treatments can start in infancy and need to be performed several times to achieve maximum lightening.”



## COMBATING SOCIAL STIGMAS

Birthmarks, particularly facial hemangiomas, can cause significant psychological and social distress for both parents and children. According to Ilona Frieden, M.D., clinical professor of dermatology and pediatrics at the University of California, it is normal for parents to feel a variety of emotions, including panic, sadness, guilt and disbelief.

“Even when you tell parents their child's hemangioma will eventually disappear, it is not necessarily good news to them, especially when their infant's appearance was unflawed at birth but is now growing a bright red lesion,” said Dr. Frieden.

Dealing with the reactions of strangers can also be stressful. When faced with stares or questions about their child's birthmark, Dr. Frieden recommends parents and children do what feels comfortable to them. For some, answering questions about the birthmark is fine, while others may choose to hand out a preprinted card with details on the condition. And some people simply choose to ignore insensitive comments altogether.

Parents and older children with birthmarks who are particularly distressed may benefit from talking to other children who have birthmarks and their parents. Ask your dermatologist if there is a birthmark support group near you. **D<sub>i</sub>**

## DERMATOLOGIC SURGERY FOR KIDS:

### *What parents should consider*

According to Children's Memorial Hospital dermatologist Annette Wagner, M.D., when faced with surgery for their child's birthmark removal, parents should ask themselves the following questions:

#### **QUESTION: Does the lesion need to come off?**

**ANSWER:** Some lesions do not require excision, so it's important to first make sure you have the correct diagnosis and prognosis. Cosmetic removal of facial lesions can result in scars that are often more noticeable than the birthmark itself. If nature takes them away, don't trade lesions for lifelong scars, Dr. Wagner recommends.

#### **QUESTION: What is the appropriate age for a child to have surgery?**

**ANSWER:** Many benign skin lesions can be removed safely with a local anesthetic at ages seven to 10. If there is no urgency to remove a birthmark, Dr. Wagner recommends postponing surgery until the child is a little older as pediatric patients are more active than other patients, increasing the risk of scar formation.

#### **QUESTION: Who should remove the birthmark?**

**ANSWER:** Parents should select a surgeon with experience working with both birthmark removal and children.

#### **QUESTION: Will there be a scar?**

**ANSWER:** All excisional surgery leaves a scar, even in the hands of the world's most talented plastic or reconstructive surgeons. The severity of scarring depends on the location and size of the birthmark, the activity of the patient post-operation and the skill of the surgeon.

# Marked at Birth *a parent copes with a child's hemangioma*

Patient Perspective by  
Sharon McEvoy

We didn't realize that our daughter had a birthmark when she was born and neither did the doctors. When Patty was about 4 days old, we started noticing a reddish area above her left eye. Within two weeks, it covered nearly a third of her face. It was flat and light pink, but fairly pronounced. During her check-up, her pediatrician off-handedly remarked, "That's a big port-wine (stain)." He didn't know it, but those words hit me like a ton of bricks. The thought of my little girl having a disfiguring mark on her face was unbelievably painful. I couldn't bear the thought of the social stigma she would face for the rest of her life.

Following the doctor's visit, I was inconsolable. Fortunately, it was a misdiagnosis.

I researched birthmarks on my own and the more I read, the more convinced I became that it was not a port wine stain, but a hemangioma. The cause of hemangiomas is unknown. Basically, it's an abnormal development of the blood vessels. They occur most frequently in white female infants, typically appearing shortly after birth, growing for a period of months before slowly dissolving. I was referred to a pediatric dermatologist at the University of California-San Francisco medical center who confirmed that it was a hemangioma. After our first visit to a pediatric dermatologist, I said to my husband, "Patty is in the best possible hands." He asked, "How do you know that?" I couldn't explain it. I just knew.

By the time we saw the pediatric dermatologist, the hemangioma was threatening the development of Patty's left eye. She was started on an oral steroid just in time for her eyesight to develop normally. We were prepared for some side effects from the steroids, but really didn't notice anything, except for her chubby cheeks. Her appetite was fine. She wasn't cranky and still slept well.

I used to stare at her forehead every day searching for the slightest change. Gradually, over the course of weeks and months, the

improvement was dramatic. Patty's eyelashes eventually filled in. Although, her eyebrow is still thinner on that side and she still has a few spider veins. If they persist, we'll have them removed, if she wants to.

The physical effects were one thing, but it was the emotional aspect that was really difficult. I just wanted to get her cosmetic surgery to make it go away instantly, but we came to realize that we had to be patient. We had to trust the doctors, not worry so much about what others thought, and love her with all our hearts.

*"I just wanted to get her cosmetic surgery to make it go away instantly, but we came to realize that we had to be patient."*

My family and friends never treated her any differently. Most outsiders couldn't help but stare. It was the first thing people saw when they looked at Patty. Kids would ask if she had a boo-boo or "What's that thing on her head?" Some parents would admonish their kids for asking, but you knew they were also curious themselves and just couldn't think of a polite way to ask. We just told them that is was a birthmark, that it didn't hurt her, and that it would go away. The kids absorbed that, nodded, and then were fine with it, as if it were no big deal. I really preferred the kids' straightforward approach.

Patty's hemangioma was just a part of who she was. Most of the time, we didn't even really see it, we just saw our wonderful little girl. Looking at her baby pictures, you can see how happy she was, even with that huge red splotch on her head. Sometimes I did feel deprived of that 'beautiful baby' experience, but she's the most wonderful child anyone could hope for. Now I go for weeks without even thinking about it. I would have never thought that was possible when she was an infant.

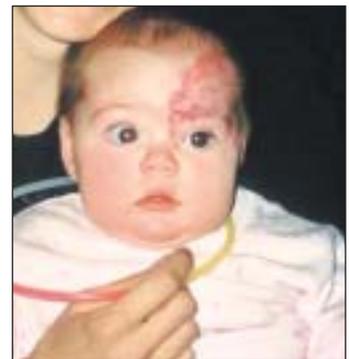
I won't say I'm glad it happened, but the experience has changed me. I don't care if Patty's hair is out of place or if she gets something on her clothes. Those kinds of things just aren't important. The beautiful child inside is what matters. D;



Patty - 2 months old; before treatment.



Patty - 5 months old;  
3 months after treatment



Patty - 8 months old;  
6 months after treatment



Patty - 2 years old, with her mother, Sharon

PATIENT NEWS

## GUARANTEEING INSURANCE COVERAGE *of* CHILDHOOD DEFORMITIES

Although birthmarks may seem harmless, some may actually develop into severe deformities. They can also cause emotional scars, making children self-conscious and sometimes causing withdrawal from social contact.

While the medical technology exists today to improve these disfiguring skin conditions, many children are often denied insurance coverage and their families face large out-of-pocket expenses — which they may not be able to afford.

The Treatment of Children's Deformities Act of 2003, H.R. 296, introduced by Rep. Sue Kelly (R-NY), would guarantee insurance

coverage of procedures associated with childhood deformities, disfigurements, and congenital defects.

The bill currently has 25 cosponsors and the American Academy of Dermatology Association continues to focus its efforts on increasing the number of cosponsors in the House of Representatives. They are working with Senator Russell D. Feingold's (D-WI) office to introduce legislation in the Senate.

**What can you do to guarantee insurance coverage of childhood deformities?**

Contact your elected representatives in

Washington and tell them that passage of the Treatment of Children's Deformities Act will enable physicians, not insurance companies, to determine what is medically necessary for the well being of a child. To contact your Washington Representative via the Internet to request his/her support for the childhood deformities legislation, please visit AADA's NetLink at [www.aadassociation.org](http://www.aadassociation.org).

*If you have any questions about the childhood deformities legislation in Congress please contact Paul Bonta, AADA Assistant Director, Federal Affairs, at (202) 842-3555. D;*



### THE SHADOW KNOWS!

If your shadow is shorter than you are, the sun's ultraviolet rays are at their most damaging. Trade your place in the sun for a spot in the shade — before you burn.

## A NOTE ABOUT TIMS

### (TOPICAL IMMUNOMODULATORS)



Immunomodulators exert anti-inflammatory effects on the skin without causing the potential side effects of steroids. With the use of tacrolimus ointment, pimecrolimus cream and other immunomodulators, dermatologists hope to reduce their reliance on topical corticosteroids and, therefore, diminish long-term side effects.

For children with psoriasis, the science has not quite progressed to the point that it has for other skin conditions when it comes to the usefulness of these agents. For now, Lawrence Eichenfield, M.D., said some dermatologists use immunomodulators on thin-skinned areas of the body, including the face, groin and other body creases where steroids are too strong. This use, he said, is based on anecdotal evidence and not published studies.

According to Amy Paller, M.D., the immunomodulators in their current form do not seem strong enough to penetrate the thickened skin of psoriasis. "New forms are being developed that will better penetrate the scale of psoriasis. We have treated more than a dozen children successfully, however, with topical tacrolimus ointment, especially when lesions were on the face or in the groin region," Dr. Paller said.

# RosaceaNet Latest Site at SkinCarePhysicians.com

The American Academy of Dermatology recently added **RosaceaNet** to its valuable patient education Web site, SkinCarePhysicians.com. RosaceaNet provides important information on this common condition, including a definition of the condition, information on common treatments, a list of frequently asked questions, a glossary of terms, and a complete archive of the Academy's press releases on rosacea. To visit RosaceaNet go to [www.skincarephysicians.com/rosaceanet/index.html](http://www.skincarephysicians.com/rosaceanet/index.html).



**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.

SkinCarePhysicians.com also continues to provide:  
**AcneNet • ActinicKeratosisNet • AgingSkinNet**  
**EczemaNet • MelanomaNet • PsoriasisNet**



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



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



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



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



**MelanomaNet** is an authoritative source of information on this form of skin cancer; which is highly curable with early detection.



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

# RASH DECISIONS:

## *treating diaper dermatitis and other childhood rashes*

A child's skin is as sensitive as it is soft. Along with the bumps and scrapes that are bound to occur in childhood, the delicate skin is also prone to many itchy irritations and inflamed disturbances.

The most common, persistent, and frustrating irritant to a baby's skin is diaper rash, or diaper dermatitis. Depending on the specific cause and the baby's sensitivity, diaper rash can range from a slight reddening of the skin, to open, blistering sores on the thigh, abdomen, and buttocks.

Diaper rash is caused by a combination of factors, but the main source of the raw and red lesions is constant wetness of the diaper area accompanied by friction from the child's movement, according to Anthony Mancini, M.D., associate professor of pediatrics and dermatology, Northwestern University Feinberg School of Medicine.

"A baby's skin is constantly exposed to wetness, and since this wetness is covered by a diaper, this skin may become macerated (softened) and break down," said Dr. Mancini.

Bacteria in the stool produces enzymes that can also irritate the skin. To make matters worse, when the stool is mixed with urine, that process speeds up, causing even more discomfort.

Some other common diaper-area irritants include soap residue, detergents, perfume, plastic from disposable diapers and pre-moistened baby wipes.

### PREVENTING THE RASH

"Keeping the baby's skin dry with frequent diaper changes and using a super-absorbent diaper is the most effective way to prevent and eliminate irritation," said Dr. Mancini.

Giving the baby's bottom as much fresh air as possible and avoiding the use of plastic, vinyl and nylon pants that can keep air from circulating can also aid in the red-bottom battle.

Dr. Mancini also recommends cleaning the area carefully with minimal rubbing with a soft cloth and plain water or a fragrance-free baby wipe, and applying a barrier ointment or cream on babies prone to diaper rash.

As with any prolonged condition, parents should seek medical advice from a pediatric dermatologist if the rash does not improve within three days, is spreading or develops blisters or pustules. Depending on the severity of the rash, and the possible causes, the doctor may prescribe a mild topical steroid or an anti-fungal cream.

## OTHER ITCHY SITUATIONS

Children can also develop *contact dermatitis* after their skin is exposed to an irritating substance or plant. Contact dermatitis is divided into two classifications: irritant and allergic. The characteristics of each are similar; the skin becomes itchy, red, inflamed and may develop superimposed fluid-filled blisters.

“Allergic contact dermatitis occurs when the body’s immune system senses a known allergen and reacts to it,” said Dr. Mancini. “Examples of allergic triggers include poison ivy and related plants; metals (especially in clothing snaps), buckles and jewelry made of nickel; rubber or elastic; perfume; dyes or inks and lanolin.”

Irritant contact dermatitis can occur with no previous exposure to an offending agent or after prior exposure to a product that did not produce an irritation initially. Examples of irritant triggers include harsh soaps and detergents, chemicals in household products, acids and oils.

Prevention includes avoiding contact with known allergens, the use of hypoallergenic skin products and wearing clothing with covered snaps and buckles.

“Since allergic contact dermatitis is likely to return if the allergen source isn’t identified, it’s important to work with your physician to get the correct diagnosis,” said Dr. Mancini. “Treatment for serious cases may include the use of an anti-inflammatory steroid or oral antihistamines if the rash is particularly itchy.”

*Atopic dermatitis*, also called *eczema*, is a common skin disorder that is the result of a genetic predisposition combined with numerous environmental triggers that can lead to chronic skin inflammation. The inflammation leads to areas of red, scaly and thickened skin and small bumps that may open and weep when scratched.

It can occur in teenagers and adults,

but it is most common in babies and children. According to the National Institute of Arthritis and Musculoskeletal and Skin Diseases, at least 10 percent of infants and children in America have atopic dermatitis.

“In infants and young children, atopic dermatitis is usually located on the face and the outer surfaces of the arms and legs,” said Dr. Mancini. “The condition tends to flare up during times of stress, with temperature or humidity changes, in conjunction with a bacterial infection or when the skin is irritated by fabrics or detergents.”

There may also be periods when symptoms spontaneously improve, often in the summertime. Although many affected children outgrow atopic dermatitis, the majority go on to have sensitive skin and other allergic conditions that may continue into adulthood.

In some cases, atopic dermatitis may be controlled with preventive measures, such as avoiding things that may trigger the symptoms, keeping the skin from drying out with the use of moisturizers and emollients and avoiding harsh soaps. Warm soaks may also soothe itchy and crusty lesions.

For many patients, medically supervised treatment may be necessary, which may include the use of oral antibiotics, antihistamines and anti-inflammatory creams.

A new type of drugs, called topical immunomodulators (TIMs), is also showing encouraging results for eczema patients. Like steroids, these new medications calm down the overactive immune system that is the cause of eczema, but they are steroid-free (see page 14 for more information).

## INFANT IRRITATIONS

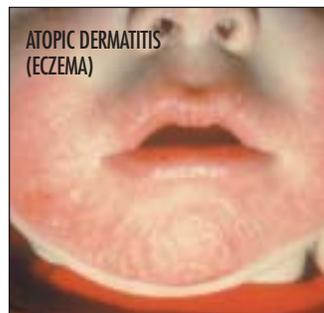
Infants are also prone to prickly heat (*miliaria rubra*), also known as heat rash, a light-colored, raised rash that is the result of blockage in the sweat glands. Prickly heat occurs most often in hot, humid conditions, but babies may also develop it in cool weather if overdressed. While

adults are not immune to this heat rash, it occurs most often in infants.

“The best treatment for prickly heat is prevention,” said Dr. Mancini. “In hot climates, keep your baby in an environment with a comfortable temperature and dressed in light clothing.”

Prickly heat occurs most often on covered or clothed parts of the body, such as the back, stomach, neck, groin or armpits, and typically goes away on its own within a few days if the affected area is kept cool and dry. Dr. Mancini adds that slightly cool baths may soothe the inflamed skin. The use of topical ointments or creams should be avoided during an outbreak of prickly heat, as they can block the sweat glands further.

If the prickly heat does not go away within a few days, or if the lesions become infected, Dr. Mancini suggests consulting with your dermatologist for further treatment.



*Candida* infections in infants are also fairly common, and can occur as a thick, white rash on the tongue or inside the mouth (thrush), or as diaper candidiasis, fiery red lesions with raised borders.

*Candida* is a yeast infection, normally found in various parts of the body and ordinarily does not cause any symptoms. Certain conditions, such as antibiotic use or excessive moisture, may allow for an overgrowth of *candida*. It is most common in newborns, infants, and older adults, but it can occur at any age. “Thrush is typically treated with an oral antifungal medicine that can be squirted into the baby’s cheeks,” said Dr. Mancini. “Diaper candidiasis is often treated with a topical antifungal cream. For severe cases, a short course of an oral antifungal medicine may be necessary.”

Because this yeast grows readily on moist, damaged skin, *candida* may exacerbate diaper rash. Dr. Mancini suggests frequent diaper changes and the use of a good barrier ointment.

Amy Gall

# When Psoriasis Strikes:

## *helping children take control*



### WHY MY CHILD?

Psoriasis is thought to be an immune-mediated disorder, meaning the immune system is triggered to cause inflammation. In addition, the growth cycle of skin cells is accelerated. “Without question there is a higher incidence of psoriasis occurring when there is a family history,” Dr. Paller said.

Dr. Paller explained that a study of 3,000 patients showed that if no parent has psoriasis, the lifetime risk for developing the disease is 4 percent. A child with one parent who has psoriasis has a 28 percent lifetime risk of developing it. And if both have it, there is a 65 percent chance that their children will also develop it.

**P**soriasis, a chronic skin condition characterized by inflammation, skin thickening and scaling, affects people of all ages, but it can start as early as childhood. In fact, about 31 to 45 percent of psoriasis cases begin in the first two decades of life, with 10 to 15 percent of people first showing symptoms of the chronic skin condition before age 10.

At any age, the thickened skin and scaly appearance can appear anywhere on the body — even on the scalp or nails. It is most commonly seen in children as localized areas of the redness and scaling on the knees, elbows and buttocks.

Babies with psoriasis often get well-demarcated (outlined), bright red areas in the diaper region. These areas might go undiagnosed because the diaper area is moist and thus the lesions do not appear as scaly as psoriasis typically is, according to Amy Paller, M.D., professor of pediatrics and dermatology, Northwestern University Feinberg Medical School, Chicago, and chief of pediatric dermatology at The Children's Memorial Hospital. “Many of these babies will also show similar lesions in the armpits and elsewhere,” Dr. Paller said.

The plaques of psoriasis in children are usually smaller, with thinner scaling. Children also tend to have a lower incidence than adults of psoriatic arthritis. “There is an increased incidence in children of a type of psoriasis called guttate, which means ‘tear-drop shaped.’ These are very small, red scaly lesions that often start on the trunks of children,” Dr. Paller said. “Guttate psoriasis can be associated with a recent strep infection.”

### TIPS FOR PARENTS

- Learn about psoriasis so you can teach others.
- Teach children to be their own advocates. Practice talking with the child as if you were a friend or a teacher, so the child can communicate that it is not a contagious or self-inflicted condition.
- Be good listeners and learn how the psoriasis is affecting the child. Acknowledge those feelings and encourage the child to ask for support.
- Direct your child to friends who see beyond the psoriasis.
- Realize that this is a chronic condition. Therapy often is time consuming and can be expensive.
- Help to ensure that your child receives aggressive yet safe therapy, but do not become so consumed that the psoriasis takes over and becomes the child's identity.
- Get everybody in the family involved in support, treatment, and advocacy.
- Make the child as self sufficient as possible. Encourage the child to participate in treatment.
- Set a place where treatment occurs at home to show your commitment.
- Try to make treatment fun, using games as tools.
- Always be positive and be hopeful. Have an attitude that sets an example for your child.

# Triggers & Treatments Vary

Psoriasis outbreaks can be triggered by virtually anything that irritates the skin, including physical trauma, strep infection, other types of upper respiratory infections, and stress.

Psoriasis can range from being mild and of little significance to very significant to the child and family. “If a child’s disease is worsening or significant, parents should seek out dermatologic care, especially given the rapid evolution in therapy that has been happening in the last several years,” said Lawrence F. Eichenfield, M.D., chief of pediatric and adolescent dermatology at Children’s Hospital and Health Center in San Diego, and clinical professor of pediatrics and medicine (dermatology) at the University of California, San Diego School of Medicine.

Treatments used successfully on adult psoriasis patients are not necessarily the best for children. While dermatologists cannot cure the condition, they can offer a wide variety of options that help clear psoriasis or help diminish the thickness of psoriatic skin.

Children are treated for the most part, according to Dr. Paller, with topical corticosteroids (such as steroid creams, ointments and lotions), or a combination of topical corticosteroids and topical calcipotriene, which is a synthetic form of vitamin D. Topical steroids are used to reduce inflammation, while calcipotriene is

thought to work both on reducing inflammation and by decreasing the overproduction of the skin cells.

The topical remedies tend to have fewer side effects, according to Dr. Paller, and are often used as a first line of defense. Still, topical steroids can thin the skin, and cause dilated blood vessels and stretch marks. If they are used too aggressively, the steroids might penetrate the skin and cause side effects similar to those seen with long-term oral steroid use, particularly growth retardation. Long-term and aggressive uses of topical steroids can also cause a condition in which children need stronger and stronger steroids to achieve the same effect. Calcipotriene can cause skin irritation and in extreme use can affect calcium metabolism.

Dermatologists might also use topical retinoids to treat pediatric psoriasis; however these can be quite irritating to children’s skin. Tar products are sold over-the-counter and can be effective for psoriasis. However, many children are bothered by the odor, and side effects of tar include irritation and staining.

Dermatologists generally choose between two types of treatment for children with more severe forms of the disease: ultraviolet light therapy (UVB) and systemic (oral) treatment. UVB therapy involves exposing children’s skin to a particular wavelength of light. However, while the therapy is commonly used for adults with psoriasis, its use in children is of greater concern because of the increased risk of the development of UV-induced skin cancer later in life. It is also inconvenient, Dr. Paller explained, because parents have to bring children in for treatment three or more times a week.

A new option in phototherapy for children is narrow band UVB. According to Dr. Eichenfield, the therapy narrows the band of light, which is as effective — if not more effective — as the broad band, but with less damage to the skin.

The most commonly used systemic medication is methotrexate, which can be taken orally or given by injection once a week. “Unfortunately, parameters for its safety



have not been well defined in children, but our rheumatology colleagues use methotrexate in children in even higher doses for years on end without any problems,” Dr. Paller said.

For severe psoriasis, dermatologists also are using cyclosporin and retinoids, especially in the treatment of pustular psoriasis. “Topical tazarotene, a retinoid, can be quite useful either alone or in combination with topical steroids. But one of the drawbacks is irritation, which can be minimized when steroids are used at the same time,” Dr. Eichenfield said.

Among the newest agents in topical form are tacrolimus ointment and pimecrolimus cream. These two topical immunomodulators (TIMs) can act as powerful anti-inflammatory agents and seem to work best on the face, armpits and groin.

Future treatments for psoriasis include the use of biological agents (see related article on page 22). “There is a lot of interest and promise in new biologic agents,” Dr. Eichenfield said. “As yet, however, there is little use of them in children with psoriasis. There are many clinical studies ongoing, but few have included children and adolescents. The principle is that rather than traditional therapy, which might broadly inhibit the immune system, biologic agents target and block specific elements of inflammation, which might clear the skin disease without as many side effects.”

The relationship among the patient, parent and dermatologist is key in the management of this disease, Dr. Paller said. “Our goal is to get past the skin condition. Have patients take control — be in charge of medications and dictate their social interactions,” Dr. Paller said.

*For more information and ideas for dealing with pediatric psoriasis, visit the National Psoriasis Foundation Web site at [www.psoriasis.org](http://www.psoriasis.org) or contact the NPF by phone at (503) 244-7404 or (800) 723-9166. Dj*

*Lisette Hilton*

## TIPS FOR TEENS

- Become educated and be able to have responses to questions.
- Be open.
- Understand that it’s not your fault.
- Aggressively make sure you’re being treated. If you don’t like how things are going, talk to your doctors and get some alternative therapies.
- Develop relationships with doctors, counselors, teachers or anyone who you can talk comfortably with about the condition.
- Choose some new friends if you don’t feel supported.



## Leave it to Beaver... to know a thing or two about psoriasis

**W**ard and June. Wally and the Beaver. These names instantly conjure up an image of a 1950s television family known to millions who have enjoyed “Leave it to Beaver” over the past 40 years. The success of the television show catapulted a young Jerry Mathers to high recognition fame, prompting *People Magazine* to name him one of the most well-known individuals in history.

In his role as Theodore “Beaver” Cleaver, Mathers existed on the tube as a black and white icon of comic youth. The real life of Mathers, however, is colorful and many-faceted, full of high times and triumphs as well as a few tribulations. Some of the downs in his life, such as the false rumors of his death in Vietnam, have been efficiently overcome. Other personal problems have been more serious and tougher to shake — like the actor's battle with psoriasis.

“I had it for a long time before I knew what it was,” Mathers told *Dermatology Insights*. “My psoriasis appeared sometime in the 1970s, so I was about 24. It was irritating the region of my buttocks. I thought at first that I just didn't know how to wash my clothes — that I was using too much bleach or something. Or that perhaps I had some kind of rash.”

When he injured his leg playing soccer in an intramural league, Mathers was examined by a doctor who asked him if he knew about his psoriasis. “I had no idea,” Mathers said. “I'd never even heard of psoriasis.”

Psoriasis is a chronic skin disease, characterized by scaly, reddish patches. “Some people have it on their elbows and knees,” Mathers said. “Because of where mine is at, on my buttocks, it's fairly easy to keep it covered most of the time. But on the other hand, it's in a place where it's pretty apparent where you're scratching!”

Mathers described the itching as “a kind of wave — something that comes and goes. It's the worst part of psoriasis.” Like many people with psoriasis, Mathers said his outbreaks often occur when he's

under stress. “I've been an actor a long time, but every part you get presents new challenges and there are stresses that go along with that,” he said. “My psoriasis tends to flare up at the worst possible moments.”

Psoriasis can flare up at any time, and even sleep does not offer an escape. Mathers explained, “It's very hard when you have an attack to get to sleep. I'm usually having trouble sleeping anyway, and this just adds to it. And because you're not thinking about a lot of other things when you're trying to get to sleep it's harder to distract yourself from it.”

Beyond the physical discomfort, other factors can add to the distress of psoriasis. “Emotionally it can be very difficult, because even with intimate partners, it's always there,” Mathers said. He added that people don't always have good insight into the facts about psoriasis, such as the fact that it's not transmittable.

“I think that's the biggest misconception people have.” Mathers said, “That you can contract psoriasis by rubbing or touching or being with someone who has it. Psoriasis is not contagious.” Mathers believes the other big misconception

about psoriasis is one that was perpetuated by a now defunct, but often-quoted television commercial. “Some people believe you can cure the ‘heartbreak of psoriasis’ by simply using a shampoo. So they think you're simply not washing enough or using the right products. But the real heartbreak for psoriasis sufferers is that you can't get rid of it that easily.”

Mathers said it can get “real old” trying to explain psoriasis to people who are ignorant about it. “They think it might be that you aren't washing correctly, or that you're just not using the right product. It's like anything else; when you're different and have something that people don't understand, it can be very difficult. People can be cruel.”

The sad fact is that there is no cure for psoriasis. But science is moving forward rapidly in the treatment of the skin condition. The latest buzz in psoriasis treatment has to do with biologics.

According to the National Psoriasis Foundation (NPF), biologic therapy differs from existing treatments because they target the underlying processes that drive psoriasis, and therefore halt the

progression and symptoms of the disease. Biologics target specific aspects of the immune system, thereby offering treatment that the NPF said may be safer and more effective for some patients than some current treatments. In January, 2003, the first biologic for the treatment of psoriasis was approved by the U.S. Food and Drug Administration (FDA).

“Biologics (agents that occur naturally in the body — living organisms such as cells or bacteria. Biologic agents are usually derived from living sources such as human or animal cells and genetically engineered microorganisms) are going to be a huge breakthrough,” Mathers added.

This year, the NPF launched *Step Into My Skin*, an educational campaign about psoriasis, and asked Mathers to be their spokesperson. “Because it’s a disease that many people try to hide, I wanted to use my celebrity to bring it out into the open. I thought it was time, especially with these new treatments, that the population in general — not just psoriasis sufferers — knew more about the disease.”

Mathers will be doing a tour of major U.S. cities in 2003 to talk to the public and the media about psoriasis. “I’d also like to find more ways to help people who have psoriasis,” he said.

To that end, Mathers added words of support to a *Step Into My Skin* CD of “Relaxing Jazz,” specifically designed for psoriasis patients. As a nod to Mathers’ claim to fame, the “Leave it to Beaver” theme has been given a jazzy update and is included on the CD. The CD is available free of charge through the NPF.

“Most of the time you have to endure psoriasis, live with it. This CD is something calming you can listen to — music soothes

the savage beast,” Mathers said.

Though psoriasis can be an irritating, even painful disease, the affable Mathers has lost none of the good humor that endeared him to his many television viewers. It’s been a part of his personality since his youth and carried him through many ups and down.

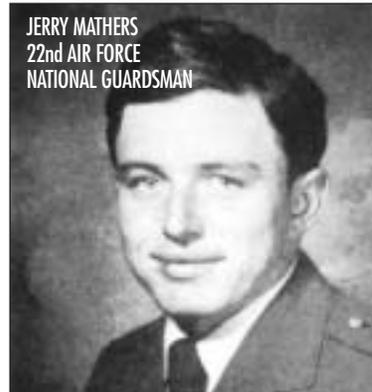
Before his successful tenure as “The Beaver,” Mathers had already worked as a child model for commercial advertisements, appeared on *The Ed Wynn Television Show* at age two, and was directed by Alfred Hitchcock in the 1955 film “The Trouble With Harry.”

After his work with Hitchcock, the young Mathers went on to appear in two Bob Hope movies and a pair of movies with Alan Ladd. But it was in 1957 that Mathers’ career skyrocketed, when he began the role of Theodore “Beaver” Cleaver, in “Leave it to Beaver.” It marked the first time a child actor was given above-credits-billing in a television show, and Mathers lived up to the hype. *Leave it to Beaver* ran for six seasons, for a total of 234 episodes. The show is now a popular part of the cable television channel TVLand stable of nostalgia shows.

After Mathers left the show in 1964, he continued in school, eventually graduating from University of California-Berkeley. A stint with the 22nd Air Force National Guard inadvertently created a publicity nightmare.

“It ran on AP and UPI (news wire services) at around the same time, and they both said the other one had run the story first,” Mathers said. “Then Shelly Winters went on the *Tonight Show* that night and said that my death had ‘killed the flower of American youth.’”

Meanwhile, Mathers was in the service, not dead, and not quite sure what was going on. “I began to get the message when



people began to get condolences. Tony Dow (Wally Cleaver) actually sent flowers to my house,” Mathers said.

Because he wasn’t acting at the time, Mathers didn’t have a manager or press

agent to compel a retraction, and it became an oft-repeated bit of misinformation.

Rumors notwithstanding, a very-much-alive Mathers settled into a successful career in investment and real estate and concentrated on his family. The father of three children, Mathers places great importance on family values.

Eventually, the acting bug began to nibble at the adult Mathers, and he began taking roles in the theater. In 1982, he reprised his role as the Beaver for a made-for-television film which spawned another series “The New Leave it to Beaver,” which ran for 108 episodes. Today Mathers continues to seek acting roles and spends time on the lecture circuit, making public appearances and lecturing about family values, his psoriasis and, of course, his famous portrayal of *The Beaver*.

Unlike many child stars who would prefer to disassociate themselves from their past, Mathers is proud of his role and the impact “Leave it to Beaver” has had on people worldwide. “It’s on in 80 countries and in about 120 languages, so its message is understood in many cultures,” Mathers said. “It offers an innocent, child’s eye view of the world as it really is. It’s something I’m very proud to be associated with.”

Although Mathers still keeps an eye on the tube, he’s not all that keen on the current state of television situation comedy shows. “The shows I’ve seen are very stark — children who watch them tend to lose their innocence very quickly. With our show, however, the entire family can watch it. No one gets embarrassed. And it’s still around, 45 years later.”

*More information about Mathers’ work with the NPF can be found on the Web site [www.stepintomyskin.org](http://www.stepintomyskin.org), or by phone at 800-723-9166. D<sub>j</sub>*

Dean Monti



JERRY MATHERS  
TODAY

## RESEARCH HORIZONS

# LIGHT THERAPY MAY HELP CLEAR PSORIASIS

Seventy-six percent of 21 patients with psoriasis achieved “clear” or “almost clear” results based on preliminary data from an open-label study combining the new biologic alefacept, a biologically engineered fusion protein (a type of biologic treatment), and narrow band ultraviolet B light (NB UVB). The results were presented in November, 2002 at the “Psoriasis: From Gene to Clinic” International Congress in London, England.

The lead investigator in the study, Jean-Paul Ortonne, M.D., Chairman of the Department of Dermatology at the University Hospital of Nice-Sophia Antipolis, Nice, France, said, “In real-world settings, physicians may combine biologics with other therapies. We are pleased to see that in

this preliminary study, alefacept plus narrow band UVB provided encouraging results.”

All 21 patients in the study receiving combination therapy achieved a 75 percent reduction in baseline PASI (Psoriasis Area and Severity Index), a standard measure of psoriasis severity. The open-label study randomized 30 men and women with chronic plaque psoriasis into three treatment groups: alefacept alone, alefacept plus six weeks of NB UVB and alefacept plus 12 weeks of NB UVB. Two weeks after the last dose of alefacept, patients' psoriasis was evaluated using PASI and PGA (Physician Global Assessment) measurement scales. The objectives of the study were to determine the safety and tolerability of combination

therapy, the efficacy of combination therapy and the total amount of light therapy needed to achieve a 50 percent PASI improvement.

The current FDA-recommended efficacy endpoint for psoriasis medications is PASI 75 reduction, which means that patients must achieve at least a 75 percent reduction in their disease area and severity. All of the patients treated with alefacept plus NB UVB achieved a 75 percent reduction in their PASI score over the course of the study. After three weeks of combination therapy consisting of alefacept plus NB UVB, 71 percent (15 of 21 patients) experienced 50 percent reduction in PASI and, after four weeks, 57 percent (12 of 21 patients) experienced 75 percent reduction in PASI score. **D<sub>i</sub>**

## HOW DO YOU CONTROL PSORIASIS?



Sheila R., diagnosed with psoriasis at age 4.

**CONTACT THE NATIONAL PSORIASIS FOUNDATION** to get information, connect with other people and learn how to take control of psoriasis and psoriatic arthritis.

Make a donation of any amount today and receive your New Member Support Kit:

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- The *Psoriasis and Psoriatic Arthritis Treatment Guide*
- The *Guide to Living with Psoriasis and Psoriatic Arthritis*



Call 800.723.9166 or visit [www.psoriasis.org/connect/insights](http://www.psoriasis.org/connect/insights) today for the support you need.



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# When to be Concerned

## about Childhood

### Hair Shedding

In the early years of a child's life, hair goes through several changes unique to child development. As early as three to four months in utero, a mini-mane of hair has begun to grow.

Cleveland dermatologist Wilma Bergfeld, M.D., described the characteristics of newborn hair for *Dermatology Insights*.



#### CHANGES TO EXPECT

“Newborn hair is very fine and it may or may not cover the scalp,” she explained. “It’s generally lost over the next four months and replaced with new hair. The hair may also change color and it may be thicker in fiber. Over time (2-3 years), the density of hair volume increases. Also the hair character can change from straight to curly (or vice versa) within this time.”

“During normal hair growth, a child’s hair gains volume from age two to five,” said Dr. Bergfeld. “At age five the hair is pretty much what it’s going to be until the early teens. At that point normal hair is about 80 to 85 percent at full growth and 10 to 15 percent is dying. The hair is already beginning to recycle between the age of two and five, but it’s pretty stable at age five.”

Dr. Bergfeld emphasized that these changes, including the initial loss of a baby’s “starter hair,” are normal physiological changes and completely expected. Likewise, many parents are concerned about the hair loss associated with “cradle cap,” but this is also a common occurrence that does not require treatment (see sidebar on page 24).

#### WHEN TO WORRY

Generally, parents don’t have to worry much about hair problems in the early stages of development, Dr. Bergfeld said. “After age five, if a child sheds their hair, that’s when we begin to look at the possible causes — fevers that may have initiated it, fungal infections, or alopecia areata (an auto-immune disease that results in patchy or complete hair loss).”



In cases of hair loss in children, an evaluation of medical history is important, Dr. Bergfeld said, particularly up to three months prior to the shedding.

“Any kind of shedding at that age can be related to another medical problem. A medical history can help us determine the cause of the shedding,” she said. “Occasionally we do laboratory tests (often to rule out other disorders).”

In many of these cases, Dr. Bergfeld said, the hair loss has evolved from a fever or infection, and once the root cause is determined and taken care of, the hair problem will begin to recover within the next three to four months.

“I have the patient back in two to three months to see what’s occurred. Generally speaking, for those patients, I put the children into an anti-dandruff shampoo once or twice a week, and make sure that they’re taking a chewable vitamin,” she said.

As a child gets older, the causes for hair loss may increase and they may become more complicated, Dr. Bergfeld said.

“As a child ages, the odds for problems being related to medical and/or emotional problems, chemical reactions such as drug ingestion, and genes are all increased. Thyroid problems, anemia and other metabolic problems can all lead to shedding. At puberty, surging hormones will cause a small percentage of male and female children to lose their hair, especially if they have androgen excess, or male pattern baldness in the family. It’s rare, but it can begin that early.”

“If it turns out to be alopecia areata, and it’s a single patch and small, one could elect not to treat at all. If there are multiple patches, many patients respond well to anthralin as a



topical ointment or lotion applied as a short contact (30 minutes to an hour, two to three time a week).”

Dr. Bergfeld cautioned that, particularly in older children, there are conditions which may not be alopecia, but mimic the signs. For instance, some hair loss may be self-inflicted.

“It’s usually not the case with an infant child, but it can start very young, anywhere from childhood to pre-teen,” Dr. Bergfeld said. “Sometimes it’s a compulsive behavior brought on by excessive stress or some other psychological factor coming from home or school. It manifests itself in behavior such as pulling, tugging, and clipping. It’s a psychological disorder and necessitates working with a psychiatrist to alter behavior.”

### HAIR STYLING CAUSES

Additionally, hair loss may result from tight braiding, a common practice with young African-American children. “The hair is slowly tugged out of the scalp and the end result is that over time it can produce trauma to the scalp that causes inflammation and can even cause permanent hair loss,” Dr. Bergfeld said. “Many African Americans begin to straighten their hair at about age 10 or 12, sometimes earlier. There’s a lot of brushing involved that can fracture and damage the hair.”



Additionally, Dr. Bergfeld said bleaching and coloring hair may cause *acquired trichodystrophy (fiber damage)*. This is likely to pass, she said, once the damaging agent is removed. “Generally, once the procedure is discontinued, the hair will return to normal within six to 12 months.”

### MAINTAINING HAIR HEALTH

Healthy children’s hair can be maintained very simply, according to Dr. Bergfeld. “It is basically cleaning the scalp and hair fibers of things that have been applied to them,” she said. “It’s important if the fiber is weakened to use conditioners. They splint the damaged hair and fill in the holes. It’s temporary but it does strengthen the hair and it does reduce friction on hair preparation tools (combs, brushes, picks).”

Do babies need a special shampoo? “The reason baby shampoos are good is because the PH is such that they don’t sting or burn the eyes,” Dr. Bergfeld said. “But it’s not so much that they’re formulated for baby hair, per se. They really contain most of the same ingredients as adult shampoos.”

Dr. Bergfeld emphasized that when hair abnormalities occur, it’s important to know that dermatologists are experts in hair, skin and nails. “At any age, if there are hair problems, a dermatologist is the physician of choice.” **Dj**

### NOTHING TO WORRY ABOUT!

All that fine, soft, light-colored hair on your infant baby’s forehead, cheeks, shoulders and back is a temporary covering called *lanugo* (also called down and *wooly hair*).

Some newborns have small white dots on the face, called *milia*, which are nothing more than enlarged sebaceous glands, another temporary condition. Mottling, which appears as blotchy skin on an infant is also common in newborns. All of these characteristics are just part in parcel of being a baby and should disappear within a few weeks. If they persist, or you’re concerned about any skin, hair or nail condition your baby has, talk to your dermatologist.



### HAIR RAISING FACTS

Many children’s hair shows features which are lost in adulthood. These include:

- Unruly hair which sticks straight up.
- Natural curls
- Hair without pigment, which darkens as the child grows.

### CRADLE CAP

If your baby appears to have a rash confined to the scalp area, it’s probably *seborrheic dermatitis*, commonly called “*cradle cap*.” It is a noninfectious skin condition that’s very common in infants, and it usually disappears over a period of weeks or months after birth. Unlike other rashes, it’s rarely uncomfortable or itchy. Cradle cap is treated with anti-dandruff or baby shampoo, with and without hydrocortisone lotion or cream, depending on the severity.



# Little Nails Need No Less Care



## *Caring for your child's nails*

**A**t the end of tiny baby fingers and tiny baby toes are tiny baby nails. Although they may appear small and impervious to problems, children's nails should be treated with the same care given to the rest of a child's health.

*when any abnormality of the nail persists, you should seek a dermatologist*

"Children's nails are more flexible, smoother, more transparent, and grow more rapidly than adult nails," said Richard K. Scher, M.D., a New York dermatologist, nail specialist, and a past president of the American Academy of Dermatology. "But they are like adult nails in that they are made up of the same elements and serve the same functions, such as protecting the fingers when picking up small objects or for scratching."

Accordingly, young nails are also similar to adult nails in that they can fall victim to nail disorders.

"Nail disorders are not common in children, but we do see them," Dr. Scher said. "And when they occur, they need to be recognized and treated."

One nail disorder dermatologists see that is particular to infants is *yeast paronychia*. "It starts out as a redness and swelling of the skin around the cuticle," Dr. Scher said, "followed by a secondary yeast fungus called candidiasis." According to Dr. Scher, *candidiasis* is most common in children who suck their thumb. "When a child's thumb stays wet or moist all the time, the yeast fungus is able to get in there."

"Generally, fungal infections of the nail are not common in children," Dr. Scher said, "but when these infections do occur, such as *tinea unguium*, a fungal infection which commonly affects the feet, it's almost always in a situation where a parent or sibling also has a fungal infection (such as athlete's foot)." Dr. Scher added that in immunosuppressed children (those on a lot of medication, or with AIDS, for instance) fungal infections may tend to be more common, more severe and more difficult to treat.

"In mild cases, these can be treated with a topical, antifungal medication," he said. "In more severe cases, or in *tinea unguium*, an oral medication may be required."

Another nail problem that predominantly affects children is *trachyonychia*, which translates in layman's terms to "rough nails."

"The nails lose their natural smoothness and get rough, and

sometimes very thick," Dr. Scher said, "and they lose their translucency or transparency."

The majority of these cases in children are idiopathic — without any known cause, but Dr. Scher said *trachyonychia* may be associated with other skin conditions, such as eczema, psoriasis, or alopecia areata (a hair disorder).

Not all nail disorders are acquired after birth. Some are passed down genetically.

One nail condition dermatologists see at birth is a condition known as *congenital malalignment of the great toenails*. Children who are born with this condition have their nails growing at an angle instead of straight out. In and of itself, this is not a serious condition. However, if severe cases are left untreated, congenital malalignment of the great toenails can cause problems for kids as they get older, and may require surgery.

"They may have trouble with ingrown nails and with performing athletic activities, because the nails are crooked, in a sense. Surgery realigns (straightens out) the nail growth center so that the nail will grow out straight."

Dr. Scher added that he sometimes sees ingrown nails in children, but remarked that most of these are not serious, and resolve on their own without requiring treatment.

In general, Dr. Scher said, parents should be observant of their child's nails.

"When any abnormality of the nail persists, you should seek a dermatologist," Dr. Scher said. "Even with children, it's dermatologists who are trained to specialize in skin, hair and nails." **Dj**



# Burning Bushes

*What you need to know about  
poison ivy, sumac and oak!*



In the West, this plant may grow as a vine but usually is a shrub (pictured). In the East, it grows as a shrub. Hair grows on its fruit, trunk and leaves, which have three leaflets.



In the East, Midwest and South, it grows as a vine. In the far Northern and Western United States, Canada and around the Great Lakes, it grows as a shrub. Each leaf has three leaflets.



Grows in standing water in peat bogs in the Northeast and Midwest and in swampy areas in parts of the Southeast. Each leaf has seven to 13 leaflets.

**T**hose nasty weeds — poison ivy, poison sumac and poison oak — are the single most common cause of allergic reactions in the United States. Each year 10 to 50 million Americans develop an allergic rash after contact with these poisonous plants.

Poison ivy, poison oak and poison sumac grow almost everywhere in the United States, except Hawaii, Alaska and some desert areas of Nevada. Poison ivy usually grows east of the Rocky Mountains and in Canada. Poison oak grows in the Western United States, Canada and Mexico (western poison oak) and in the southeastern states (eastern poison oak). Poison sumac grows in the eastern states and Southern Canada.

## POISON IVY RASH

Poison ivy rash is an allergic contact rash (dermatitis) caused by contact with an oil called urushiol (you-ROO-shee-ol). Urushiol is found in the sap of poison ivy, poison oak and poison sumac. It is a colorless or pale yellow oil that oozes from any cut or crushed part of the plant, including the roots, stems and leaves. After exposure to air, urushiol turns brownish-black, making it easier to spot. Contact with urushiol can occur in three ways:

- Direct contact — touching the sap of the toxic plant.
- Indirect contact — touching something to which urushiol has spread. The oil can stick to the fur of animals, to garden tools or sports equipment, or to any objects that have come into contact with a crushed or broken plant.
- Airborne urushiol particles, such as from burning plants, may come in contact with your skin.

Once urushiol touches the skin, it begins to penetrate in minutes. In those who are sensitive, a reaction appears as a line or streak of rash, usually within 12 to 48 hours. Redness and swelling occur, often followed by blisters and severe

itching. In a few days, the blisters may become crusted and begin to scale. The rash takes 10 days or longer to heal.

The rash can affect almost any part of your body, especially where your skin is thin, such as on your face. A rash develops less often on the soles of your feet and palms of your hands, where the skin is thicker. The rash does not spread, although it may seem to when it breaks out in new areas. This may happen because urushiol absorbs more slowly into skin that is thicker, such as on your forearms, legs and trunk.

## WHO'S SENSITIVE, WHO'S NOT

We are not born with a sensitivity to poison ivy. Sensitivity develops after the first direct skin contact with the oil urushiol. An allergic reaction seldom occurs on the first exposure. A second encounter can produce a reaction, which may be severe. About 85 percent of all people will develop an allergic reaction when adequately exposed to poison ivy.

This sensitivity varies from person to person. People who reach adulthood without becoming sensitive have only a 50 percent chance of developing an allergy to poison ivy. However, do not assume that you are one of the few people who are not

sensitive. Only about 15 percent of people seem to be resistant.

Sensitivity to poison ivy tends to decline with age. Children who have reacted to poison ivy will probably find that their sensitivity decreases by half by young adulthood without repeated exposure. People who were once allergic to poison ivy may even lose their sensitivity later in life.

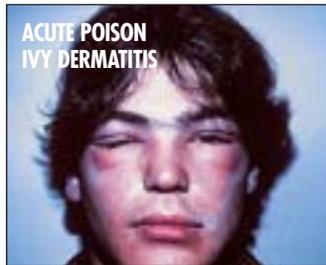
Some people are very sensitive to poison ivy. They can develop a severe rash with blisters and extreme swelling on their face, arms, legs and genitals. Such severe cases need medical treatment.

Learn to identify the poison ivy plant, and you will have taken the first step in avoiding poison ivy. The popular saying “leaves of three, beware of me” is a good rule of thumb for poison ivy and poison oak but is only partly correct. A more exact saying would be “leaflets of three, beware of me” because each leaf has three leaflets. Poison sumac, however, has a row of paired leaflets. On each of these plants, the middle or end leaflet is on a longer stalk than the other two or more leaflets. This differs from many other look-alikes.

Poison ivy can have different forms. It grows as a vine, climbing vine or low shrub. Poison oak, with its oak-like leaves, is a low shrub in the East and can be a low or high shrub in the West. Poison sumac grows to a tall shrub or small tree. The plants also differ in where they grow. Poison ivy grows in fertile, well-drained soil. Western poison oak grows wherever there is enough water, and Eastern poison oak prefers sandy soil but sometimes grows near lakes. Poison sumac tends to grow in standing water, such as peat bogs.

These weeds are most dangerous in the spring and summer. That's when there is plenty of sap and the plants easily bruise. The leaves may have black marks where they have been injured. Although poison ivy rash is usually a summer complaint, cases sometimes occur in winter, when people burn wood that has urushiol on it or cut poison ivy vines for wreaths.

Know how to recognize these toxic



ACUTE POISON  
IVY DERMATITIS



VESICULAR  
(BLISTERING)  
RASHES



A TYPICAL CASE OF  
POISON IVY

plants in all seasons. In the early fall, the leaves can turn colors such as yellow or red when other plants are still green. The berry-like fruit on the mature female plants also changes color in fall, from green to off-white, and in the winter the plants lose their leaves. In the spring, poison ivy has yellow-green flowers.

## WHAT TO DO ABOUT POISON IVY

Prevent the misery of poison ivy by looking out for the plant when you are outdoors and staying away from it. You can destroy these weeds with herbicides

in your own backyard, but this is not practical elsewhere. If you are going to be where you know poison ivy likely grows, wear long pants and long sleeves, boots and gloves. Remember that the plant's nearly invisible oil — urushiol — sticks to almost all surfaces. Do not let pets run through wooded areas since they may carry home urushiol on their fur. Because urushiol can even travel in the wind if it burns in a fire, do not burn plants that look like poison ivy.

Barrier skin creams such as a lotion containing bentoquatam offer some protection *before* contact with poison ivy, poison oak or poison sumac. This over-the-counter product prevents urushiol from penetrating the skin. Ask your dermatologist for details.

Barrier creams offer little hope against poison oak and ivy after you've been exposed, although new products may offer some protection. These may soon be marketed throughout the United States. In addition to being able to properly identify rashes caused by poison plants (and instruct patients in ways to avoid them) dermatologists combat these rashes with a variety of treatments, including compresses, topical and oral medications and cortisone treatments. For the best course of treatment, see your dermatologist. **Dj**

## TREATMENT: A POISON IVY PRIMER

If you think you've had a brush with poison ivy, poison oak or poison sumac, follow these simple steps:

- Wash all exposed areas with cold running water as soon as you can reach a stream, lake or garden hose. If you can do this within five minutes, the water may keep the urushiol from contacting your skin and spreading to other parts of your body. Within the first 30 minutes, soap and water are helpful.
- Wash your clothing with a garden hose outside or in a washing machine with detergent. If you bring the clothes into your house, be careful that you do not transfer the urushiol to rugs or furniture. You may also dry clean contaminated clothes. Because urushiol can remain active for months, wash camping, sporting, fishing or hunting gear that was in contact with the oil.
- Relieve the itching of mild rashes by taking cool showers and applying over-the-counter preparations like calamine lotion. Soaking in a lukewarm bath with an oatmeal or baking soda solution also may ease itching and dry oozing blisters. Over-the-counter hydrocortisone creams are not strong enough to have any effect on poison ivy rashes.

In severe cases, prescription cortisone can halt the reaction if used early. If you know you have been exposed and have developed severe reactions in the past, consult your dermatologist. He or she may prescribe cortisone or other medicines that can prevent blisters from forming. If you receive treatment with a cortisone-like drug, you should take it longer than six days, or the rash may return.

## 6 Common Myths *about* Poison Ivy

### SCRATCHING POISON IVY BLISTERS WILL SPREAD THE RASH.

**False.** The fluid in the blisters will not spread the rash. Before blisters form, the rash is spread by urushiol on your hands, for instance, by scratching your nose or wiping your forehead. Avoid excessive scratching of your blisters. Your fingernails may carry bacteria that could cause an infection.

### POISON IVY RASH IS "CATCHING."

**False.** The rash is a reaction to urushiol. The rash cannot pass from person to person; only urushiol can be spread by contact.

### ONCE ALLERGIC, ALWAYS ALLERGIC TO POISON IVY.

**False.** A person's sensitivity changes over time, even from season to season. People who were sensitive to poison ivy as children may not be allergic as adults.

### DEAD POISON IVY PLANTS ARE NO LONGER TOXIC.

**False.** Urushiol remains active for several years. Never handle dead plants that look like poison ivy.

### RUBBING WEEDS ON THE SKIN CAN HELP.

**False.** Usually, prescription cortisone preparations are required to decrease the itching.

### ONE WAY TO PROTECT AGAINST POISON IVY IS BY KEEPING YOURSELF COVERED OUTDOORS.

**True.** However, urushiol can stick to your clothes, which your hands can touch and then spread the oil to uncovered parts of your body. For uncovered areas, barrier creams are sometimes helpful. Learn to recognize poison ivy so you can avoid contact with it.

## IMMUNIZATION

Investigators have found that most people could be immunized against poison ivy through prescription pills. These pills contain gradually increasing amounts of active extract from the plants. However, this procedure can take four months to achieve a reasonable degree of "hyposensitization." In addition, the medication must be continued over a long period of time and it can often cause uncomfortable side effects. This procedure is recommended only if the doses are given before contact with the plant, and only for individuals, such as firefighters, who must live or work in areas where they come into constant contact with poison ivy. Consult your dermatologist for his or her advice on whether you should consider immunization.



### Neoral® Pregnancy Registry for Psoriasis & Rheumatoid Arthritis

The Neoral® pregnancy registry is an ongoing, national research study to evaluate the outcomes of pregnancy in women who have psoriasis (PSO) or rheumatoid arthritis (RA) and have been treated with Neoral® (cyclosporine, USP) MODIFIED. This registry was established with grant support from Novartis in conjunction with experts in teratology, obstetrics and gynecology, rheumatology, dermatology, and transplant surgery at Thomas Jefferson University.

The purpose of the Neoral® registry is to enroll all women with either PSO or RA who are pregnant and are taking Neoral®. With the information gathered, we hope to gain valuable knowledge so that we can better advise patients with these conditions who must take immunosuppressants during pregnancy. Patient confidentiality is strictly maintained.

If you have patients with PSO or RA who have taken Neoral® at any time during their pregnancy, you are encouraged to notify the registry, as early in the pregnancy as possible. To obtain more information and/or to register patients, please contact the registry at: 1-888-522-5581, or our email address:

[neoral.registry@mail.tju.edu](mailto:neoral.registry@mail.tju.edu)  
Our website is: <http://www.jeffersonhealth.org/tjuh/neoralregistry/>

# A Mother's Skin *needs* Care Too!



*what can be done about melasma and stretchmarks?*

**D**uring pregnancy, vast changes occur each day as life forms itself, from the moment of conception until birth. The mother's skin is going through changes as well — some that occur during pregnancy and others that become apparent after the birth of her child.

Some pregnant women experience a brown pigmentation of the facial skin called “*melasma*.” Sometimes called “the mask of pregnancy,” melasma is a condition that many child-bearing women experience, although the condition is not restricted to pregnancy. It can also affect men, and Asian skin is very susceptible. The dark patches that appear on the face, are usually on the cheeks and around the eyes, but melasma may also affect the area above the lip and the forehead.

Pregnancy-related melasma usually occurs when the body is exposed to sunlight during the hormonal changes that occur during the gestation period.

Dermatologists often treat melasma with topical creams or lotions that help to exfoliate the skin and clear it up. In more severe cases, steroid creams may be used. The best course of treatment, based on your skin type, can be determined by your dermatologist. Melasma can usually be cleared up in three to four months, once a treatment is started.

Another concern for pregnant women is *Striae gravidarum*, or *stretch marks*. They are acquired as a result of the separation of collagen, which occurs as the skin stretches over the course of carrying a child to term.

These marks, which usually appear in the later stages of pregnancy as bright red or purplish lines, affect 50 to 90 percent of all pregnant women. Most women acquire stretch marks on their lower abdomen, but they can also appear on the breasts, thighs, hips, buttocks, and arms. If your mother or sister had stretch marks, it's likely you'll have them too, and if you had them in your last pregnancy, you're likely to get them again (the ones you already have will temporarily darken and may extend).

Stretch marks are not painful, but they can cause discomfort in the form of dryness and itchiness. A good lotion can take care of that. Unfortunately, no matter what you may have heard, there's no “miracle lotion” that's going to take away stretch marks if you have them. Many women simply accept them and wear them as badges of accomplishment.

New techniques, such as laser surgery, may offer the option to improve the appearance of stretch marks. Talk to your dermatologist if you're concerned about them. **Dj**



# News from the National Institutes of Health

## *Promising new cancer treatment shrinks tumors in patients with melanoma.*

*A new approach to cancer treatment that replaces a patient's immune system with cancer-fighting cells can lead to tumor shrinkage, researchers reported in the journal Science in September 2002. The study demonstrated that immune cells, activated in the laboratory against patients' tumors and then administered to those patients, can attack cancer cells in the body. The experimental technique, known as adoptive transfer, has shown promising results in patients with metastatic melanoma who have not responded to standard treatment. With further research, scientists hope this approach may have applications to many cancer types, as well as infectious diseases such as AIDS.*

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In the study, 13 patients with metastatic melanoma (a deadly form of skin cancer) who had not responded to standard treatments were treated with immune cells produced in the laboratory specifically to destroy their tumors. The treatment resulted in at least 50 percent tumor shrinkage in six of the patients, with no growth or appearance of new tumors. Four additional patients had some cancer growths disappear.

Researchers have tried previously to treat cancer with immune cells but the cells did not survive well in the body. "In the past, only a fraction of a percent of the cells we injected were able to survive, and they would persist for only a few days," said Steven A. Rosenberg, M.D., Ph.D., of the National Cancer Institute (NCI), the lead researcher on the study.

Improvements in the way immune cells are generated in the laboratory and the way patients' bodies are prepared to receive them, however, have led to dramatically different results. "We have been able to generate a very large number of immune cells that appear in the blood and constitute a majority of the immune system of the patient. These persist for over four months and are able to attack the tumor," Dr. Rosenberg said.

The adoptive transfer technique fights cancer with T cells, immune cells that recognize and kill foreign cells that have invaded the body. Researchers used a small fragment of each patient's

melanoma tumor to grow T cells in the laboratory, using T cells originally taken from the patients. Exposure to the tumor activated the immune cells so that they would recognize and attack cells from each specific cancer.

Once the T cells had multiplied to a sufficient number to be used for treatment, they were administered to patients. Patients were also given a high dose of a protein called interleukin-2 (IL-2), which

stimulates continued T cell growth in the body. Prior to the immunotherapy, chemotherapy had been used to deplete patients' own immune cells, which had proven ineffective at fighting the cancer.

Diminishing the old cells provided an opportunity for the new T cells to repopulate patients' immune systems.

Analysis of blood and tumor samples from many of the patients who responded favorably to the treatment revealed that the administered immune cells were thriving, multiplying rapidly, and attacking tumor tissue. T cells activated against melanoma became the major component in patients' immune systems. They persisted for several months and were able to destroy metastases throughout the body.

Over time, patients' old immune systems recovered, restoring their ability to fight infections. Researchers report that among the patients in the study, only occasional opportunistic infections developed during treatment.

Other side effects were mild autoimmune disorders. T cells act by recognizing a protein fragment called an antigen on the outside of the tumor cells. Antigens found on tumor cells may also be found on certain normal cells in the body, making them vulnerable to attack. Autoimmune effects among the patients in the study were mild and easily controlled.

Although the treatment is highly experimental, researchers are optimistic that it may, in the future, extend beyond the treatment of patients with melanoma. It should be possible, they say, to raise immune cells that will recognize and attack many tumor types.

Similarly, the same technique could potentially be used to treat some infectious diseases, such as AIDS.

For more information about this study and other clinical studies at the NCI taking place at the NIH in Bethesda, Md., call 1-888-624-1937. For information on clinical studies taking place elsewhere, please visit the NCI Web site at [www.cancer.gov](http://www.cancer.gov) or contact the NCI Cancer Information Service at 1-800-4-CANCER. D;

# Survey Participation *is key to* Acne Drug Access

The United States Food and Drug Administration (FDA) is closely monitoring female patients' participation in a special survey about the use of isotretinoin, an oral medication used to treat severe forms of acne (brand names Accutane®, Amnesteem® and Sotret™). If a large number of female patients do not enroll in the survey, tougher regulatory standards with tighter controls on patient access to the drug are possible in the near future.

The FDA instituted a risk management program for this medication in April, 2002, because isotretinoin can cause severe birth defects. The purpose of the program is to confirm that female patients are not pregnant when they begin taking isotretinoin, and that they do not become pregnant while taking the medication or for one month after stopping treatment. There are three similar programs in place for the three available medications: The "SMART" program — which stands for System to Manage Accutane® Related Teratogenicity — is for Accutane®. The "SPIRIT" program — which stands for System to Prevent Isotretinoin-Related Issues of Teratogenicity — is for Amnesteem®. The "IMPART" program — which stands for Isotretinoin Medication Program Alerting you to the Risks of Teratogenicity — is for Sotret™.

Female patients using isotretinoin are required to meet four qualifications regarding birth control and pregnancy:

- 1) have two negative pregnancy tests,
- 2) select and commit to using two effective forms of birth control simultaneously,
- 3) read and sign an informed consent agreement, and
- 4) learn about and be encouraged to enroll in a confidential survey designed to determine if the pregnancy testing and contraception counseling requirements of the new prescribing regimen are lowering the number of unborn babies exposed to this medication (see related article).

In addition, dermatologists who prescribe isotretinoin must follow strict guidelines before prescribing the medication, and they must affix a yellow qualification sticker to each isotretinoin prescription they write. Pharmacies cannot fill isotretinoin prescriptions without this sticker, and must fill the prescription within seven days of the qualification date on the sticker with no more than a 30-day supply and no refills are allowed. **Dj**

*FDA requires, all Accutane® prescriptions must bear this label.*



## SURVEY FACTS

The FDA is closely monitoring the participation of female patients in the survey that tracks the birth control habits of female patients using isotretinoin. Female isotretinoin patients are strongly encouraged to enroll in the isotretinoin survey, to help ensure access to this important acne fighting drug.

The isotretinoin survey:

- is confidential.
- is brief — 3 to 4 brief questionnaires are mailed over a six-month period concerning the pregnancy testing and contraception counseling elements of the risk management program.
- is a paid survey. Participants are paid \$20 upon enrollment and \$10 upon completion.
- is convenient. The survey application form is contained in both the patient prescription booklet and the drug blister package.

For more information ask your dermatologist, or visit the FDA's Web site at [www.fda.gov/cder/drug/infopage/accutane/default.htm](http://www.fda.gov/cder/drug/infopage/accutane/default.htm).

## WHAT YOU CAN DO

To help ensure that isotretinoin remains accessible for the treatment of severe acne, Denver-based dermatologist Barbara R. Reed, M.D., who serves as chair of the American Academy of Dermatology Association's special task force on isotretinoin, urges female patients who use isotretinoin to comply with the pregnancy prevention and testing program and to participate in the confidential survey. She also suggests to her patients that they encourage their female friends and family members who take isotretinoin to do the same.



80 PERCENT OF SUN DAMAGE OCCURS BEFORE AGE 18. SUN EXPOSURE CAN PREMATURELY AGE, DISFIGURE, EVEN KILL. BY AGE 18, 80 PERCENT OF THE HARM MAY ALREADY BE DONE. THIS YEAR, SKIN CANCER WILL STRIKE MORE THAN 1 MILLION PEOPLE. USE SUNSCREEN. SEEK SHADE.



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