COMMON SKIN PROBLEMS V

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24 Common Skin Conditions

Jimmy scratches all day. When he's under stress, it gets worse and then the scratched skin gets infected. I feel so bad for him. It's hard to see your child suffer like this.

—Leanne, 38, mother of an 8-year-old with severe eczema

The bad news about common skin conditions is that they are just that—common. The good news is that the majority of problems you and your skin may face over a lifetime are treatable and can be fixed. In some cases, the skin ailment is chronic, waxing and waning in severity, so knowing how to handle it on an ongoing basis will make you a comfortable partner with your condition. In other cases, the problem is acute and once it's over, it's done with (some of these acute problems are covered in "Skin Emergencies," Appendix 3).

▪ XEROSIS

Dry skin, what doctors call *xerosis* (pronounced zir-OH-sis), is both common and annoying. It is caused in part when the skin cannot retain water. Although young

FIXING CRACKED FINGERTIPS: KRAZY WHAT?

Cracked fingertips can be a big problem for people with dry skin. When deep, painful fissures occur, try to apply Aquaphor or some other thick ointment. If this fails or objects start to slip from your grasp, I advise patients to apply a thin layer of cyanoacrylate (one brand is Krazy Glue). This forms a water-protective coating that sheds in time when your top layer of epidermal cells sloughs off naturally. Be very careful when using this glue, since it is not officially recommended for this use and can stick your fingers together. BE CAREFUL!

people can develop xerosis, as the skin ages its water-retaining abilities wane, so dry skin especially becomes a problem of older individuals. Dry skin is often exacerbated by a cold, dry climate, the use of forced-air heating, and excessive washing of the skin without appropriate moisturization.

The main complaint of people with dry skin is itching. The skin appears rough, cracked, and scaly. The natural markings of the skin become pronounced. Look at the back of your hand under a magnifying glass and you will see many fine crisscrossing lines surrounding the hair follicles. These are the so-called natural skin markings. In severe cases of xerosis, there may be horizontal superficial cracks or fissures, which have been likened to the appearance of a cracked, dry riverbed.

In all cases of xerosis, prevention is the key. Simple steps such as decreasing the frequency of washing, using gentle and non-irritating soap, and frequently applying moisturizers are recommended.

For most mild cases of xerosis treatment with bland emollients such as Eucerin cream is effective. Thicker creams and ointments are the best moisturizers to use and these should always be applied after any type of hand washing or bathing. In more severe cases of xerosis—those in which fine cracking or superficial fissuring is present—a week of topical corticosteroid may often be necessary to reverse the changes. Heavy-duty moisturizers such as Lac-Hydrin, which contains lactic acid, can be helpful—although it stings a bit at first on irritated skin.

▪ ITCHING

Itching, also known as pruritus, is perhaps the most common symptom of all skin diseases. You feel an unpleasant sensation that elicits a compelling desire to scratch. There are many potential causes of itching in the skin. Just a few of the physical stimulants that can trigger it are vibrations, chemical irritants, certain drugs, various underlying internal diseases, dry skin, aging of the skin, and various forms of eczema. Stress and other psychological factors can also play a role in itching.

Because dryness of the skin is one of the most common reasons for a person to experience itching, the initial treatment of pruritus should always include rehydration of the skin, with frequent application of an effective moisturizer. If you have tried this general treatment and the itching persists, or if there are obvious signs on the skin suggesting another problem, see your dermatologist.

Treatment of pruritus includes identifying the underlying cause and some general symptomatic relief measures. Avoid extremes in temperature at home and at work. Also avoid very hot showers and overly warm clothing. Hot environments, hot showers, and the like usually make the itching worse. Generous application of an effective moisturizer frequently throughout the day can often help. There are also several over-the-counter itch preparations that provide excellent relief; one such product is Sarna lotion, which contains menthol and phenol. In severe cases, a physician may prescribe oral antihistamines, such as Benadryl or Zyrtec, to provide additional relief. Avoid topical lotions that contain diphenhydramine, the active ingredient in Benadryl, because it may worsen the situation by causing an allergic reaction of the skin.

In rare situations, persistent unexplained itching may be a sign of serious internal disease. If you've had unremitting itching, consult your doctor.

▪ DERMATITIS

A word that simply means inflammation of the skin, dermatitis is often used synonymously with eczema. Both words are broad general terms that need to be further qualified by the type of dermatitis and its location. Regardless of the type three stages are often recognized: acute, subacute, and chronic. Each of these represents a stage in the evolution of the inflammatory process that underlies dermatitis.

Acute eczematous inflammation is an intense redness of the skin with

tiny little blisters. Severe itching is often present. In the subacute stage, there may be redness, scaling, and overlying cracking or fissuring of the skin. Itching is also a common symptom at this stage, as are pain, stinging, and burning. In the chronic stage of eczematous inflammation, there is thickening of the skin with accentuation of the normal skin lines, in addition to cracking, fissuring, and evidence of scratching. Dermatologists can usually tell you've been scratching by the long scratch lines where your fingernails wandered in search of relief.

Let's take a look at the main types of dermatitis or eczema.

▪ ASTEATOTIC ECZEMA

Asteatotic eczema, which is also known as eczema craquelé or dry skin eczema, is actually a severe form of xerosis. It arises after excess drying of the skin and is most common in elderly people and during the dry winter months. The inflammation process can be seen on almost any skin surface area, but by far occurs mostly on the lower legs. In addition to rough and scaly skin, there are often thin, red raised patches with cracks (now you know where "craquelé" comes from), which can bleed. Pain rather than itching is associated with these patches. Further scratching of the skin or applying agents that further dry out the skin (for instance, calamine or alcohol-based lotions) will invariably worsen the condition.

When asteatotic eczema is mild to moderately severe, it can be treated simply with bland lubrication such as Vaseline or Aquaphor and a low-potency topical steroid ointment such as hydrocortisone ointment 1% twice daily. In its more severe form, you may need to resort to open wet

CHICKEN SOUP FOR YOUR SKIN

An excellent way to soothe and heal dry or otherwise irritated skin is to apply open wet dressings. Follow these instructions:

1. **Soak a cotton pillowcase or handkerchief in tepid tap water.**
2. **Wring it out so it is still damp.**
3. **Apply to the affected area and leave in place for 10 to 15 minutes.**
4. **Apply lubricant after removing.**
5. **Repeat several times a day as needed.**

dressings (see box, page 274), followed by the application of a moderate-strength topical steroid ointment.

Once the condition subsides, prevention is key. As with all types of xerosis, you should pay particular attention to avoiding activities and substances that excessively dry out the skin, such as frequent bathing, harsh soap, and lack of lubrication. Once the problem has been reined in, concentrate on daily lubrication of the skin with an over-the-counter thick moisturizing cream or ointment.

▪ Atopic Dermatitis

Atopic dermatitis is a chronic eczematous condition that frequently flares into an acute stage. It usually begins early in life and waxes and wanes. At various stages throughout life, the disease may behave differently. Infants and very young children often have outbreaks on the face and either patchy or generalized eczema of the body. In adolescents and those adults still affected—the condition often abates in adulthood—the eczema is generally localized in a symmetric fashion in such areas as where the arms bend and the back of the knees. The hands may also be involved.

Several factors are thought to play a role in this disorder: genetic susceptibility (it often runs in families); a personal or family history of atopy, meaning the presence of hay fever, very dry skin, asthma, or eczema; alterations in the immune system; and, possibly, allergies to such airborne substances as house dust, mites, or mold.

An outbreak of atopic dermatitis usually starts with redness and severe itching. Scratching leaves the skin dry, scaly, and thickened. This scratching causes more itching, creating more scratching—this is a textbook example of the "itch-scratch cycle" made famous in television commercials. There can also be a superficial infection that results from breaking the protective barrier of the skin; this is characterized by a honey-colored crust overlying the eczematous areas. As the injured area heals, areas of lightened or darkened skin may linger, although they gradually improve with time.

Other features associated with atopic dermatitis may include keratosis pilaris (tiny rough red bumps on the upper arms), darkening of the skin around the eyes, an increased number of lines on the palms, and marked sensitivity to irritants such as wool, clothing, fabric softeners, and cold dry weather.

Several factors are known to worsen atopic dermatitis and trigger acute exacerbations. If you understand these aggravating stimuli and try to control them, you'll have a better record of keeping this disorder in check. Anything that increases dryness or aggravates the sensation of itching, stimulating the desire to scratch, can trigger an outbreak. Avoid extremes of and changes in temperature, activities that cause profound sweating, decreased humidity, excessive washing of the skin, and contact with topical irritants such as harsh soap and detergents or irritating chemicals. As with any chronic condition, stress can be an aggravating stimulus. Avoiding stressful situations is easier said than done, but if you can manage your life in a way that reduces stress, your skin will love you. Certain foods may also provoke an acute flare-up of atopic dermatitis.

When topical treatments such as moisturizers, open wet dressings, and corticosteroid creams and ointments fail, depending on how severe the problem is, oral prednisone or an injection of corticosteroid may be used to end the need to scratch and give your skin a chance to recover. Antibiotics may even be used if there is also superficial infection of the skin, such as impetigo.

Spend time trying to understand which specific factors trigger your atopic dermatitis, and try to come up with ways to avoid them or minimize their presence in your life. Adjust your environment to become more agreeable. This may include maintaining a cool stable temperature in the home, avoiding overdressing and situations of excessive sweating, humidifying the house, and minimizing airborne allergens and dust. Relaxation techniques such as meditation work well for some people.

▪ NUMMULAR DERMATITIS

Nummular dermatitis is a common and often chronic condition that usually occurs in middle-aged and older adults. Its coin-shaped red lesions are often quite itchy, starting as small marks with tiny blisters and expanding and coalescing into larger patches. There is often crusting over the center of these lesions and evidence of superficial infection. The usual locations are the back of the hand, the forearms and calves, the flanks, and the hips.

It is not clear what causes nummular dermatitis, but in most other kinds of eczema, these lesions are more common during the winter months.

As with all types of dermatitis, it's a good idea to use a gentle soap, avoid frequent washing, and keep your skin well lubricated. During an outbreak of nummular dermatitis, the acute, subacute, and chronic stages

may all be present at once, so a combination of treatments may be used. Treatment options include a strong topical corticosteroid, oral antibiotics, open wet dressings, and anti-itch medications such as oral antihistamines.

CONTACT DERMATITIS: WHEN YOUR SKIN TOUCHES SOMETHING IT SHOULDN'T

Dermatitis that is caused by allergy to certain compounds is one of the most frequent skin problems. It occurs when cells in your skin react to chemicals or compounds to which they have become sensitized in the past. Through a very complex mechanism, your immune system remembers that it does not like a particular "allergen," and, in response, mounts a full-blown defense against it. Cells march to the area of contact and pour out chemicals that cause severe itching, blistering, and even breakdown of the skin. Once the itching and blistering have resolved, hyperpigmentation, or discoloration of the skin, may last for some time.

Allergic dermatitis due to poison ivy or similar plants is usually obvious. Avoiding the plant is the best defense. When you have developed a reaction to another compound, such as nickel, nail polish, perfume, or latex, but it is not clear what you are actually allergic to, patch testing by your dermatologist will help identify the culprit. In this procedure tiny amounts of dozens of chemicals are placed on your back and, a few days later, are studied for a reaction.

The best way to deal with an acute allergic contact dermatitis like poison ivy, sumac, or oak is:

1. Wash the area with soap and water.
2. Wash your clothes to remove the resin.
3. Apply a topical corticosteroid cream.
4. Use a moisturizer.
5. Take an antihistamine pill for itch.
6. Do open wet dressings (see page 274).
7. In severe cases, where swelling is uncomfortable and itching severe, your doctor may prescribe several days of an oral corticosteroid called prednisone.

▪ HAND DERMATITIS

An eczematous inflammation of the hands, which may be uncomfortable and can interfere with work, is usually caused by irritant contact dermatitis or allergic contact dermatitis. It is no surprise that people in certain occupations, such as cleaners, hairdressers, nurses, and others

who wash their hands frequently or come in contact with chemicals and other irritants, are more prone to develop hand dermatitis.

The symptoms are similar to those of other dermatitis conditions. A detailed history by your dermatologist can help sort out exposure to irritants or substances that may cause an allergic contact dermatitis. You may be asked to keep a diary for a week or two in order to reveal a pattern that zeroes in on the offending agent or situation.

If an allergic contact dermatitis of the hands is indeed suspected, your physician will most likely order a series of patch tests to try to identify the causative agent. Your condition will improve if you can eliminate exposure to the chemical that is causing the reaction. However, other conditions can be mistaken for hand dermatitis, so your doctor should also check for fungal infection and psoriasis.

In severe cases of hand dermatitis, which do not respond to topical treatments such as liberal use of moisturizers and topical corticosteroid creams, ultraviolet phototherapy can sometimes be helpful. This is a treatment prescribed and monitored by dermatologists in which a light booth is used to deliver carefully controlled ultraviolet radiation to skin.

▪ Dyshidrotic Eczema

Dyshidrotic eczema is a reaction that develops on the hands and feet. The exact cause of this condition, which is characterized by tiny itchy blisters, is not known, but stress seems to play a role.

Dyshidrotic eczema seems to go through several stages, beginning first with moderate to severe itching with subsequent eruption of numerous fine blisters on the palms, the soles, and the sides of the fingers and toes. The tiny blisters slowly resolve in several weeks, followed by peeling of the palms and soles.

Treatment is similar to that for other forms of eczema. Identifying and eliminating stressful circumstances in your life may also be helpful.

▪ Stasis Dermatitis

Stasis dermatitis occurs most often on the lower legs in patients with bad venous circulation. Venous insufficiency, another term to describe the circulation problem, simply means that the blood flow from these far reaches of your body back to the heart is impaired. Signs of venous insufficiency may include swelling of the lower legs and varicose veins. The

eczematous eruption, however, does not develop in all patients with venous insufficiency, and the reason for its presence in certain individuals is not clear.

Acute inflammatory stasis dermatitis shows up as a very itchy isolated red patch on the lower leg. There often is weeping of fluid, crusting, and at times tiny blisters. In severe cases, a more generalized itchy eruption can occur on various other parts of the body. This is called an *id* reaction.

In the chronic form of stasis dermatitis, a brawny, reddish brown discoloration of the lower calves develops. As the problem gets worse, a reddish brown lesion with some bluish tint is seen on the lower inside calf. Scarring ensues and this area often becomes firm with overlying skin thickening. The skin may have a bumpy cobblestone appearance. It is at this stage that one is at risk for leg ulceration. Because the skin is often quite tight and scarred, the slightest trauma can break down the skin, resulting in ulcer formation. Such ulcers are sometimes quite hard to heal, but the use of new artificial skin is promising. Chronic stasis dermatitis is best treated with topical corticosteroids and daily compression with prescription compression stockings; the latter is critical for healing and to prevent further acute inflammatory attacks.

▪ SEBORRHEIC DERMATITIS

Seborrheic dermatitis is a common chronic condition that arises in oily areas of the head—specifically the scalp, the scalp line, the eyebrows, around the nostrils and mouth—and on the chest. Less frequently the armpits, the groin, and the buttocks are involved. The cause is not known, but a yeast called pityrosporum ovale is probably a player.

In infants and children, seborrheic dermatitis appears first as cradle cap and later as dandruff in the scalp. The typical appearance in adults is that of redness throughout the scalp and scalp line. In addition, scaling over the eyebrows, nose, beard region, and chest can be seen.

When a moderate to severe amount of fine dry white scaling—commonly known as dandruff—is seen throughout the scalp (or on your navy blue suit), some people interpret it as dry skin and cut back on washing. That's not a good idea—by decreasing the frequency of hair washing, more scale accumulates, which may cause further inflammation throughout the scalp. Treatment therefore includes more frequent hair washing (daily or every other day) with an anti-dandruff shampoo that contains selenium sulfide or zinc. Regardless of which one you choose, the shampoo should

be lathered up generously throughout the scalp and left on for five minutes before rinsing off. A non-greasy topical corticosteroid solution may also be prescribed to apply throughout the scalp twice a day to combat the itching.

For treatment of the red scaly areas on the face or chest, a low-potency topical corticosteroid cream and an anti-yeast cream (Nizoral) to combat pityrosporum ovale should help.

Since seborrheic dermatitis tends to be a chronic recurring process, maintenance therapy with anti-dandruff shampoo and the other treatments mentioned may be necessary.

▪ PSORIASIS

Psoriasis is a relatively common inherited disease of the skin which is characterized by overproliferation of the skin layers. While it often bears the brunt of Madison Avenue glibness ("the heartbreak of psoriasis"), it can indeed be a difficult problem for those who have it. It affects approximately 1 to 3 percent of the population. The exact cause of psoriasis is not fully understood, but major advances in the study of this skin condition have taken place in the last several years and it is becoming clearer that inherited abnormalities in the immune function of the skin definitely play a role.

Psoriasis has favorite locations where it likes to set up house, including the scalp, elbows, knees, and buttocks. A typical patch of psoriasis can be a circle, an oval, or even an irregular shape; it is red (often brick red) with overlying thick, silvery scales. When the scale is peeled off, one can usually see tiny areas of bleeding, like pinpoints. On the buttocks, the armpits, or the groin, psoriasis often appears as a red smooth lesion without much scale. Patches of chronic psoriasis tend to remain fixed in their one position for months.

Guttate psoriasis is a common form of the condition that often erupts following a streptococcal sore throat or a viral infection of the upper respiratory tract. It is a generalized eruption of many pinpoint to 1 centimeter pink-red papules with overlying scale.

Certain types of arthritis may coincide with the skin lesions of psoriasis. Factors known to provoke or exacerbate psoriasis are trauma to the skin, infection such as strep throat, certain medications, low calcium levels, and stress. Psoriasis may also be more prevalent in the HIV-positive population (though of course having psoriasis does not mean you have AIDS).

Psoriasis is treated with topical creams, oral medication, and ultraviolet light therapy. The exact treatment depends largely on the type of psoriasis and the extent of cutaneous involvement. For limited psoriasis, your dermatologist will probably prescribe a topical therapy such as corticosteroids, a topical vitamin D compound called calcipotriene (Dovonex), tar preparations, a topical vitamin A derivative called tazarotene gel, or anthralin. Should these topical therapies not work or if the extent of the psoriasis is significant, your dermatologist may recommend an oral medication such as methotrexate, acitretin (a derivative of vitamin A), or cyclosporine (a medication that affects the immune system). Ultraviolet light therapy may be suggested in tandem with oral psoralen, a compound, which when taken by mouth and absorbed, interacts with the ultraviolet light to reduce psoriasis patches.

Various specific treatments are also available when psoriasis has broken out on your scalp, including medicated shampoos containing tar or salicylic acid, baby oil to put in your hair at night to loosen up the scale, or topical corticosteroid solutions. Psoriasis tends to be a chronic condition—although it often responds to therapy, it nevertheless frequently recurs. By rotating several of the treatments that have been outlined, your dermatologist can help you achieve the best control of this skin condition.

▪ PITYRIASIS ROSEA

Pityriasis rosea is a common skin condition that is usually seen in young adults. The exact cause of this eruption is not known. Typically, its first symptom is an isolated 1- to 3-inch, round-to-oval pink lesion with a tiny central collar of scale. This isolated first patch, called the herald patch, can arise anywhere but is most commonly seen on the chest or upper arms and legs.

Several days or weeks after the onset of the herald patch, similar but smaller lesions erupt over the entire trunk, arms, and legs, sometimes in the pattern of a Christmas tree. (Typically, pityriasis rosea does not involve the face). Most of these lesions do not cause any discomfort, but sometimes there is a mild itching sensation.

This skin disease usually runs its course over a period of four to twelve weeks. No specific treatment is necessary, but in cases with severe itching, your dermatologist may recommend a topical corticosteroid or ultraviolet therapy.

▪ Dermatosis Papulosa Nigra

Dermatosis papulosa nigra is an entirely benign condition that many black people experience. Multiple brown or black bumps, each no bigger than a peppercorn or millet seed develop most often on the face and neck. Under the microscope they look very much like seborrheic keratoses, the growths I call "barnacles of life." The easiest way to treat this condition is to gently scrape the papules off. Some physicians like to gently burn or freeze them, but I prefer a technique that simply scrapes the bumps off at the level of the epidermis—this minimizes hyperpigmentation, or worse, white spots.

▪ Common Pigmentation Problems

VITILIGO

Vitiligo is a relatively common disorder of pigment loss with great social impact. People with the condition develop white patches on their skin where the pigment-producing melanocytes have been destroyed. Because of the resemblance of vitiligo to some forms of leprosy, in certain parts of the world it is confused with the ancient infectious disease. In those situations, the social stigma historically associated with leprosy is wrongly attached to patients with vitiligo.

Vitiligo is thought to be an autoimmune disease. Somehow the body sets up a process whereby the immune system destroys the melanocytes. In fact, because of the autoimmune nature of the disease, it is sometimes seen in the skin of people with other diseases in which the immune system attacks the body's own cells, such as thyroid disease, pernicious anemia, and collagen-vascular diseases.

Vitiligo, which occurs in all populations but is more noticeable in people of color, usually starts suddenly with white patches on the skin. It develops most commonly on the hands, feet, genitalia, and face. It also appears on the cheeks, around the eyes and near the mouth. Vitiligo may occur in one spot or one segment of the skin, such as on an arm or leg, or it can be generalized, appearing over the whole body.

Vitiligo usually appears first in childhood. Itching can be an early symptom—it's probably a sign that the body's immune cells are slugging it out with the melanocytes. Because of the emotional toll this condition carries, it is especially frustrating to physicians that we cannot easily predict or control its course.

Treatment has generally been unsatisfying and consists of the use of topical corticosteroids. Since tanning in the sun can stimulate pigment production, this is one of the few areas where dermatologists, under carefully regulated circumstances, make use of ultraviolet radiation combined with an agent called psoralen. Melanocytes can repopulate the vitiligo patch from pigment cells that survive in the hair follicles and from the adjacent normal skin.

Many people, frustrated by their condition, have tried tattooing, surgical treatments, and cosmetic covers. Because none of these approaches is predictably successful, some people with vitiligo seek the help that comes from attending support groups. When there is a 50 percent or greater pigment loss over the whole body, depigmentation may be recommended in order to make the skin a uniform color. This is an irreversible step: if the person doesn't like the result, there will be no means of changing back to the original pigmentation. A topical medicine called monobenzone is used daily modifying the treatment frequency as the pigment fades.

Surgical solutions to vitiligo have been tried and consist of grafting normally pigmented skin into the depigmented area. Punch grafts of normal skin have been used but result in a confettilike appearance of pigmentation. Recently, I published a technique that I invented for the treatment of vitiligo that has proved simple, quick, easy to perform in the doctor's office, and does not appear to result in the irregular pigmentation. I call it the Flip-Top Pigment Procedure and an example of the results are shown in the "Color Atlas of Your Skin."

HYPERPIGMENTATION AND HYPOPIGMENTATION

In people of color, the effects of trauma to the skin may become more obvious than in more lightly pigmented individuals. Common causes of post-inflammatory hyperpigmentation are acne, lacerations, eczema, and even a special type of reaction to medication called *fixed drug eruption*. It can develop in response to ampicillin, tetracycline, sulfa, or other medications. In this case a circular patch of jet black discoloration can develop in dark-skinned people and persist for months, getting worse with each subsequent exposure to the medication. It is harmless, but until the cause is known, and then avoided, it will not resolve.

After skin injury, whether from an abrasion, rash, or other disruption of the skin surface, post-inflammatory hyperpigmentation can develop. When the trauma occurs in the epidermis, there is an increase in the transfer of melanin molecules to the surrounding epidermal cells. When the der-

mis is also injured, pigment-containing scavenger cells, or melanophages, set up house in the dermis for a long time, resulting in discoloration of the skin that can last for years.

There is no perfect treatment for post-inflammatory hyperpigmentation. It will get better with time so patience is essential, but topical corticosteroid cream can help in some cases. Minimizing sun exposure is also important. In my experience, laser treatment does not work, and may in fact worsen the situation.

Hypopigmentation can occur for the same reasons as hyperpigmentation and similarly requires patience and time for improvement. Because hypopigmentation just represents a decrease, rather than complete absence of pigmentation, recovery can be expected as the pigment cells from adjacent areas step up to the bat.

In order to determine the nature of your skin pigment problem your dermatologist will likely examine you under a Wood's light—a black light that helps determine the extent and depth of pigmentary change.

▪ Did Medicine Cause My Rash?

Three out of every thousand prescriptions in this country result in some sort of allergic reaction. Although all medications come with an extremely long list of potential side effects, it is important to identify a true allergic reaction to medication, because taking the same medication again can result in further problems. Similarly, if you do not actually have an allergy to a medication but merely couldn't tolerate it in the doses given, you need to keep that in mind should you need that medication in the future.

It is helpful to distinguish between the latter situation and a true allergy to a drug. Fewer than 10 percent of adverse drug reactions are due to a true allergy to the medication. In an allergy the body's immune system responds to a foreign chemical, typically a protein, and such reaction will happen every time the person takes the drug.

The most common types of drug reactions, however, are not allergies, but intolerances. For instance, if erythromycin is taken on an empty stomach, it might cause nausea or vomiting. That is not an allergy, however, it is an adverse reaction to the drug. Likewise, many women who take antibiotics find that they result in a yeast infection. This is also not an allergy, but an adverse event due to a change in the bacteria that normally grow in your gastrointestinal tract.

When a drug causes a reaction on the skin, it often will involve wide areas of the skin. There will also be a correlation between when the drug was taken and when the rash started.

About half of all drug reactions on the skin are called exanthems. An exanthem is the splotchy type of flat red rash with clear areas. It may cover most of the trunk, legs, and even face, but does not usually involve the palms and soles. This kind of rash will typically begin within ten days of starting a new medication, and some people develop a fever as well. The most common drugs causing this type of reaction are antibiotics: ampicillin, amoxicillin, trimethoprim/sulfamethoxazole (Septra, Bactrim, Co-Trimoxazole). The rash will typically go away on its own within one to two weeks of stopping the medication. Scaling and peeling may follow after the red rash fades.

Hives are also common, constituting about one-fourth of all drug reactions. When you get hives from drugs, it usually happens within thirty-six hours after starting the medication. An individual spot of hives will last fewer than twenty-four hours. Again antibiotics are the most common culprits, and 1 in 50 people taking amoxicillin and 1 in 100 people taking either ampicillin or cefaclor will end up with hives. Upon discontinuing these medications, the eruptions should cease within one to two weeks, if not much sooner.

The sun can also cause a number of drug-related reactions. When a medicine is absorbed by your body, it is distributed throughout the various tissues, including the skin. When the skin is exposed to ultraviolet light from the sun or even a tanning booth, certain itchy types of rashes can occur in uncovered areas. Drugs that commonly cause these type of eruptions include sulfa drugs (including some water pills and diabetes pills), nonsteroidal anti-inflammatory drugs (such as piroxicam), members of the tetracycline family, and griseofulvin, a common antifungal medication. Drug rashes occur in children, and, like those in adults, usually resolve promptly. Very rarely more serious rashes develop in children and adults in response to medication and require medical attention.

If you develop a drug rash while taking more than one medication, it may be necessary to use the process of elimination to determine which medication is causing the rash. This should be done only in close consultation with the doctor prescribing the medications. The watchword is to be patient, but your dermatologist, internist, or family doctor will likely be able to get to the bottom of your drug rash.

▪ BIRTHMARKS

Birthmarks, which doctors call hemangiomas, are benign tumors of blood vessels that appear on the newborn or soon after birth. Some birthmarks disappear on their own during childhood. The term birthmark is also used for other skin lesions present at birth, but I have found that most people mean hemangioma when they use the term. Before we take a look at some of the most common types of birthmarks and treatment options, let's clear up some myths about their cause.

Birthmarks don't have anything to do with what Mom ate during pregnancy, bad thoughts she might have had, or problems with delivery. These growths sometimes seem to be stimulated by estrogens, which is why many resolve over time following birth, as the estrogen levels in the child change or as those estrogen receptors present on the birthmark itself change.

STRAWBERRY HEMANGIOMAS

A common type of birthmark, the strawberry hemangioma, occurs in children, developing shortly after birth. A strawberry hemangioma typically starts as a small red bump and grows rapidly over two to three months. Then its growth stops and a process called involution, when a hemangioma shrinks in size, begins. In most cases it leaves little evidence that it was ever there.

Strawberry hemangiomas are red or purple on the surface and are raised above the surface of the skin. Sometimes the mass or lump under the skin can be sizable. If it is near the neck or mouth it can interfere with head movement and eating; near the eye, it can interfere with eyesight and thus affect the infant's proper development of vision; near the nose, breathing can be affected. Any hemangioma near the mouth, in the mouth, or near the nose is of special concern. Though it is rare, this can herald the development of a similar growth in the throat so any child suspected of having this problem should be evaluated by a pediatric ear, nose, and throat specialist.

Parents are obviously concerned about the appearance of these lesions on their children, which can make management of strawberry hemangiomas a bit controversial. On the one hand, a conservative approach is called for. We know that the majority of hemangiomas of this sort go away on their own. Ten percent go away by age one and 90 percent will have vanished by age ten.

But what about those that don't go away or resolve too slowly? Most parents and doctors would like the hemangioma to be gone by age four or five, the time when the child is about to start school and make new friends.

Many doctors are resistant to excising, or completely removing, these growths, whether with traditional or laser surgery, because they can be large and the resulting permanent scar may cause more cosmetic problem than the original birthmark. In addition, incomplete excision of the hemangioma can result in recurrence within scar tissue, which can become more problematic. Most important, a hemangioma should not be excised during the rapid growth phase.

If the hemangioma is in a vital location, treatment with corticosteroids—by mouth for a defined period such as a month or two, or even by direct injection by a skilled physician—can slow or even reverse growth. In rare cases where life is at risk, interferon, a naturally occurring chemical that affects the immune system, can be used as well.

Whether to excise or not is a decision that should be made in consultation with experts who treat hemangiomas as a routine part of their practice. Dermatologists, plastic surgeons, and ear, nose, and throat surgeons may all have expertise in this area and should consult closely with the child's pediatrician. My advice is to be conservative when feasible; when function is compromised, as when the birthmark is close to the eyes, nose, or mouth, of course be aggressive. When the situation falls in between, consider excision if the plastic surgeon believes the resulting permanent scar will be superior to that which would result from natural resolution.

EROSIONS

A common problem that does occur with hemangiomas is that during the involution phase the surface skin may break down, causing a depressed area or erosion. This can be painful for the child. Proper wound care can help speed healing and eliminate the pain. Follow your doctor's instructions carefully; this will probably involve using an antibiotic cream such as Bactroban and keeping the area covered with a nonstick dressing such as Telfa. In more advanced cases, a special dressing called Vigilon, which is a soothing gelatinlike material, can help a great deal (keep it refrigerated between uses so it will have a cooling effect as well). Never use alcohol or peroxide, which sting terribly and are not helpful; instead, tap water and

gentle soap will do the trick. A topical anesthetic cream such as ELA-Max may help control some of the pain that the child feels.

PORT WINE STAINS

Port wine stains, another common birthmark, are flat red or purple discolorations of the skin that is visible at birth. Some port wine stains can be associated with a condition called Sturge-Weber syndrome; your pediatrician will know whether this possibility should be further investigated, depending on the size and location.

When lasers first became available to treat these tumors, there was much excitement about their potential to remove the entire hemangioma. We now know that there are birthmarks of this type that can get 50 to 80 percent improvement, but complete eradication with current technology is not always possible.

Each treatment course must be tailored to the child. For example, with a very young child, parents must discuss the use of general anesthesia with the dermatologist and pediatrician. Although this approach does allow the dermatologist to be more complete in treating the birthmark than office treatments done with topical anesthetic, there are minimal risks associated with anesthetizing a young child that must be taken into consideration. New lasers that cool the skin make it much easier to treat large areas on children in the office setting.

By the time a person reaches adulthood, port wine stains have often evolved from the original pink or red childhood mark to a purplish birthmark. When lasers were first introduced, we thought that only pale birthmarks responded to the treatment but, happily, this has not proven to be true. Medical insurance does not normally cover treatment for such birthmarks because it is considered cosmetic.

Whatever approach you take with laser, remember that it is a gentle, prolonged approach that slowly eliminates the growth under the surface of the skin (see chapter 13).

STORK BITES

Stork bites on the back of the neck are a form of port wine stain that do not resolve on their own but are not an issue for most people. You don't see them every day and hair covers them. Similar lesions over the eyes, so-called angel's kiss, tend to resolve on their own.

Fungus or Cancer: The Story of Lymphoma of the Skin

A group of skin rashes that look something like early psoriasis or mild eczema may actually be precursors to outright lymphoma, a form of cancer of the white blood cells. This serious condition is important to know about because it may occur in areas that are not sun-exposed, and may be mistaken for eczema or psoriasis. It can also develop as early as the teen years. In general if such a rash does not go away with topical corticosteroid medication, it should be biopsied by your dermatologist.

The disease can pass through several stages, including a flat or patch stage, a stage with large, raised scaly areas, and a tumor stage in which nodules are present on the skin. In a small number of people, the rashes progress to involve the bloodstream and the lymph nodes.

The key player in what is called *cutaneous T-cell lymphoma* (CTCL) is the T-cell type of white blood cell (the same type of cell that becomes infected with HIV). When these special T-cells in the skin start growing out of control, they can cause several different types of skin lesions.

In its earliest stages, CTCL can be treated with topical therapies including super-potent steroids or topical nitrogen mustard. Photochemotherapy, or the use of an oral photosensitizing drug along with ultraviolet A light (PUVA), is also a helpful therapy for such patients.

Dr. Richard Edelson, chairman of dermatology at Yale since 1985, pioneered the use of a clever therapy called *photopheresis.* In this treatment, the patients ingest the same photosensitizing drug that would be used in PUVA. The patients then have their blood filtered, as though on dialysis, and about 10 percent of their white blood cells are removed. These white blood cells are then exposed to the same ultraviolet A light that is used in PUVA therapy for psoriasis. Finally, these cells are then injected back into the patients. In some patients, this therapy can result in improvement of the more severe forms of the disease.

An indication of how quickly science progresses is the fact that even this procedure, relatively new by conventional standards, is giving way to more specific ways of manipulating the abnormal T-cells that are at the root of the condition.