

A Disorder That Can Get Under Your Skin-Washington Post, August 8, 2000

By Judy Packer-Tursman
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With the school year around the corner, clearing up blemishes on the face, shoulders, neck, chest and upper back is undoubtedly a top priority for many teenagers.

Acne is the most common skin disorder, affecting nearly 17 million Americans at any one time; between the ages of 12 and 25, 85% of people experience its symptoms, which range from a few pimples to a face full of walnut sized nodules. Acne vulgaris, the most common form, is often at its worst for ages 16 to 18. But the condition can begin in children as young as 9 or 10 and sometimes will continue into adulthood.

“Acne is not necessarily just a simple disease of teenagers that you automatically grow out of,” says Alan Shalita, chairman of department of dermatology at the State University of New York Downstate Medical Center in Brooklyn.

Shalita says it’s unwise to expect instant improvement from acne medications, whether over-the-counter (OTC) or prescription. “It’s not going to disappear overnight. Most treatments take four to six weeks to exert significant benefit.”

Left untreated, acne can lead to disfiguring permanent scarring. But beyond the physical impact, acne can have devastating psychological effects: not just embarrassment, self-consciousness and poor self-image but also depression, social isolation and even suicidal thoughts.

“When kids with bad acne come in, I can not make eye contact with them-and as soon as their acne improves, I can start teasing and joking with them,” says Laurence Miller, a board-certified dermatologist in Chevy Chase. “That sense of self-confidence and self-esteem starts coming through. That’s how important [treatment] is.”

STANDARD MEDICATIONS

Shalita, Miller and others cite continuing improvement in medications that target several factors contributing to acne - plugged up hair follicles, the bacterium *P. acnes* (*Propionibacterium acnes*), increased oil (sebum) production and inflammation.

They insist most acne cases can improve if patients comply with medical advice and follow simple rules of hygiene: cleaning skin gently, choosing cosmetics carefully and avoiding frequent touching of affected areas. Peels and facials may help temporarily, they say, but there’s no scientific evidence that they have lasting value.

Depending on the severity of acne, doctors may recommend one of several OTC or prescription topical medications, oral medicines or a combination. Retinoids (tretinoin and the newer adapalene and tazarotene), which are derived from vitamin A, can be irritating to the skin but they’re generally effective at unblocking pores, allowing other topical medications to penetrate the follicles better. Benzoyl peroxide, which fights *P. acnes* and may reduce oil production, is used alone or combined with topical antibiotics (often erythromycin or clindamycin) to stop or slow bacterial growth and reduce inflammation.

If these treatments don’t work, dermatologists may prescribe oral antibiotics, typically minocycline, tetracycline, erythromycin or doxycycline.

If all else fails to relieve a severe case of acne, isotretinoin (Accutane) may be prescribed. Also a vitamin A derivative, Accutane can have serious side effects, including extreme dry skin and major birth defects involving women who become pregnant while using the drug. Doctors who prescribe Accutane to women require them to use two forms of birth control simultaneously and to take monthly pregnancy tests.

“Certainly the packet insert [for Accutane] can be intimidating, but it’s a very useful drug,” Says Roselyn E. Epps, head of pediatric dermatology at children’s National Medical Center in Washington. “With monitoring and taking the proper precautions, it can be effective.”

CAUSES

Acne is partly caused when the skin’s oil producing glands are stimulated by sex hormones. The oil allows certain bacteria to grow in the pores, and those bacteria release substances that promote inflammation, causing pimples. Oil blocks the pores, creating blackheads and whiteheads.

There’s also a genetic component. While it’s unknown why acne affects some people more than others, children of two parents who have had severe acne are more prone to the condition. For these youngsters, many doctors prefer to start treatment at the first sign of tender red bumps, typically using aggressive therapies to prevent scarring. Miller says acne scars “are very stubborn to even the best plastic surgery techniques.”

Chocolate and greasy foods are often blamed for acne, but studies indicate diet has little effect on its development in most people.

To handle hormonal influences, physicians have long prescribed birth control pills as an off label treatment for women with acne, particularly if the condition flares up around menstruation. In 1996 Ortho Tricyclen became the first birth control pill specifically approved by the Food and Drug Administration for acne, and other birth control pills are under investigation for this use. Shalita notes that the pills, which reduce oil production, can take up to three months to help.

Meanwhile, researchers in Pennsylvania are working to find other mechanisms that control oil production in the skin. Diane Thiboutot, associate professor of dermatology at Pennsylvania State University’s College of Medicine in Hershey, laments that acne studies slowed when Accutane became available in 1982 because it is so effective. “But Accutane is not for everyone,” she says. “There’s the need for safer alternatives.”

OTHER APPROACHES

The desire for alternatives has led some people to use natural astringents, such as witch hazel and tea tree oil, which has anti-inflammatory properties.

Scott Dinehart, associate professor of dermatology at the University of Arkansas, says a decade-old Australian study found that tea tree oil works basically as well as benzoyl peroxide 5% He notes that most people going to a dermatologist have tried benzoyl peroxide 5% or 10% and need stronger medications.

Stephen Weiss, a board certified family physician in Albuquerque, NM says he starts “with the most natural and least invasive treatment.” At times he recommends a daily dose of 25 to 50 mg. of zinc piconlinate for at least 12 weeks. “It seems a lot of patients with acne have low levels of zinc and high levels of copper,” he explains. He

may also suggest a three month course of vitamin A (25,000-50,000 units daily) or using milk thistle, which has an active ingredient called silymarin.

“Before we had Accutane, we tried treating acne with massive doses of vitamin A, but you can harm the liver,” Miller says. “You have to be careful.” In a benzoyl peroxide product that he prescribes, he notes the manufacturer has added zinc, a common ingredient in European products for acne. “I’m not sure it’s scientifically valid,” he says, “but some syndromes in dermatology respond to zinc, so it may help the skin.”

“A lot of dermatologists give anecdotal evidence it helps,’ Dinehart says, “but...I’ve not seen well-controlled studies that come out positive for zinc.”