# Patient Information for Acne vulgaris in Child/Adult

# Overview

Acne, also known as acne vulgaris, is thought to be caused by multiple factors. Overproduction of a normal oil on the skin, called sebum, increases under the influence of hormones. This, coupled with insufficient shedding of exfoliating dead skin cells, plugs hair follicles. The plugged follicle can become inflamed and have increased growth of normal skin bacteria, *Propionibacterium acnes*. Medications such as lithium, cortisone, hormones, iodides, some seizure medications, or isoniazid can also cause acne lesions.

There is no cure for acne, but certain measures can help prevent more breakouts. Acne can result in scarring, so minimizing breakouts is important.

## Who's At Risk

Acne affects 85-100% of people at some point in their lives, and it usually begins at puberty. Acne can persist into the 30s and beyond. In fact, 5% of people over 45 still have acne. People of all ethnic backgrounds get acne.

#### Signs & Symptoms

Acne results in a variety of lesions. The most common acne locations include the face, neck, chest, and back, where the most sebaceous glands are located. Along the jaw line is a common location in adults. "Blackheads" (open comedones) and "whiteheads" (closed comedones) are follicular plugs that are either sitting below the skin surface (whitehead) or oxidized from being exposed to the air (blackhead). Papules are small pink to reddish-brown bumps, pustules are pusfilled lesions, and nodules or cysts are deeper pus-filled lesions.

Mild acne consists of a few papules/pustules and/or comedones. Moderate acne has an increased number of lesions. Severe acne has numerous comedones, papules, pustules, and may have painful nodules.

Acne can result in permanent scars, which can appear to be depressions in the skin or hyperpigmentation, which is dark red or brown flat marks where the acne lesions were.

# **Self-Care Guidelines**

Traditional treatments can help prevent acne. Cleanse the acne-prone areas with gentle soaps or cleansers. Avoid irritants, such as rubbing and other alcohols, and abrasive scrubs and greasy products on the skin and in the scalp. Products labeled "water-based" or "noncomedogenic" will help reduce clogged pores.

There are also a variety of over-the-counter medications that may help. These are meant to be preventative therapies and should be applied in a thin layer to the entire area on a regular basis. If applied consistently, you may see small improvements quickly, but results are generally seen after a few months. Benzoyl peroxide (most effective), is available in a variety of forms and strengths. Benzoyl peroxides tend to dry the skin, though, so if you have dry skin, use a weaker-

concentration product; for oily skin, consider higher strengths. It can also bleach your clothing and towels. Peeling agents (exfoliants) such as salicylic acid, sulfur, resorcinol, and alphahydroxy acids (glycolic, lactic, pyruvic, and citric acid) can also help but will also cause some dryness of the skin.

Microdermabrasion performed every 7-10 days ("lunchtime peel") has been a popular albeit costly way to control mild acne and can be done by a health care professional or in a salon. The same types of peeling agents are available in over-the-counter products, which can be used at home at much less cost.

## When to Seek Medical Care

If you have moderate or severe acne that has not improved enough with self-care, seek medical help.

#### **Treatments Your Physician May Prescribe**

Topical (or external) treatments for acne include one or more creams, washes, or gels that include:

- Antibacterial agents and antibiotics such as benzoyl peroxide, clindamycin, erythromycin, sulfur, sodium sulfacetamide, and azelaic acid.
- Retinoids vitamin A-derived products such as tretinoin, tazarotene, and adapalene.

Oral treatments may include:

- Antibiotics such as tetracycline, minocycline, doxycycline, erythromycin, ampicillin, clindamycin, trimethoprim-sulfamethoxazole, azithromycin, or cephalosporins.
- Oral contraceptives and spironolactone have been found to help regulate hormones.
- Isotretinoin, a strong drug with many side effects, for severe acne unresponsive to the above treatments.

Procedures:

- Special "blue light" treatments are being investigated to treat acne but are usually not covered by insurance.
- Several types of laser treatments also help acne and are often used with other treatment methods; treatments are expensive, must be repeated for several months, and have variable efficacy. Insurance may not cover laser therapy.
- Laser resurfacing, plastic surgery, and/or dermabrasion may help reduce the prominence of old acne scars.