ACNE

Patient Information Fact Sheet

>What is acne?

Acne is a skin condition that commonly affects teenagers, usually girls between the ages of 14 and 17 years and boys between 16 and 19 years. It can continue into the 20s and 30s and sometimes first develops at these ages.

It affects the face in 99% of people and can also be present on the back and chest. It may be more severe at one site than another and may affect one or all three areas. Acne can range from mild acne, where blackheads, whiteheads and a few inflamed spots are present, to severe acne where there may be large, deep lesions that can take weeks to settle and may cause scarring.

Acne is not infectious and cannot be passed on to another person. Acne can cause considerable psychological stress and should always be treated. Without treatment it could last for up to eight years and cause permanent scarring and disfigurement.

>What causes acne?

There are many myths surrounding acne—it is not caused by poor hygiene or dirt and cannot be cured by washing more frequently, in fact this may make the condition worse. In addition, there is no evidence that eating chocolate or sweets can cause or worsen acne. However, some people may find that certain foods make their acne worse. It may help to avoid these foods but a strict diet alone will not cure acne.

The sebaceous (oil) glands are small glands surrounding the fine hairs on the skin. These glands produce sebum (oil), which is released via the hair follicles. Acne is usually triggered by puberty when rising levels of male hormones (androgens) in both boys and girls cause the sebaceous glands to produce more sebum. This excess sebum causes the lining of the hair follicles to become inflamed, making them narrower and resulting in the formation of plugs at the surface of the skin. Bacteria can then grow causing redness, swelling and the formation of pus. The black in a blackhead is not dirt but dried oil and shed skin cells.

>How is acne treated?

The choice of treatment depends upon the severity of the acne. All acne should be treated as it will not improve if left untreated and could become worse. Mild acne is usually treated with a topical lotion, cream or gel (applied directly to the skin). Many of these products contain an ingredient called **benzoyl peroxide**, which has an antibacterial effect and needs to be used daily over a period of months before improvement occurs. Benzoyl peroxide is found in many acne preparations that can be purchased over the counter, but is also available on prescription in different concentrations. **Azelaic acid** (Azelex) is less irritating than benzoyl peroxide and also fights bacteria, but it may take many months to produce an improvement, particularly in moderately severe acne. It is used when there are large numbers of blackheads present.

Topical antibiotics such as **erythromycin** and **clindamycin** (Clindagel, Evoclin) may be prescribed for mild acne and are often given in combination with benzoyl peroxide. In moderate acne, topical treatments containing substances known as retinoids, such as **tretinoin** (Avita, Atralin, Retin-A), or retinoid-like substances, such as **adapalene** (Differin) may be used. These



products increase sebum drainage, reduce plug formation on the skin surface and increase skin renewal. They should not be used in pregnancy.

Isotretinoin (Amnesteem, Claravis, Sotret) can also be given in tablet form for severe acne. This drug is prescribed when antibiotics and other treatments have not been effective and must not be taken during pregnancy. Because of their high risk of causing birth defects in unborn children, these drugs falls under a restricted distribution program, approved by the FDA, in order to minimize fetal exposure. The program is called iPLEDGE. Only prescribers and pharmacies registered in the program may prescribe or dispense these drugs.

Combination products for topical use are also available (clindamycin and benzoyl peroxide [Duac], adapalene and benzoyl peroxide [Epiduo]). In moderate and severe acne, topical treatments are usually given in combination with oral antibiotics (eg, doxycycline (Monodox, Vibramycin), erythromycin (Ery-Tab), minocycline (Dynacin, Solodyn), tetracycline). Treatment needs to be continued for at least three months. Little improvement may be noticed during the first month of antibiotic treatment. Around 75% of people with acne will see an improvement with antibiotic therapy. Side effects that may be caused by antibiotics include thrush, sensitivity to sunlight, and a decrease in the effectiveness of oral contraceptives. Hormone treatments such as oral contraceptives may significantly improve acne.

>Self-help measures

- Use a mild facial cleanser morning and evening and whenever you become sweaty. Avoid scrubbing the face, as this can make the acne worse.
- Avoid squeezing or picking pimples as this will make them worse and may cause scarring.
- Use water-based moisturizers rather than oil-based products.
- Aim to eat a healthy balanced diet. If you notice that a particular food makes your acne flare up, try to avoid it.
- Drink plenty of water and exercise regularly.
- Avoid exposing your skin to too much cold, heat and sunlight. Exposure to sun can improve
 acne in about 60% of people but the use of tanning beds or lamps is not advised due to the longterm risks of sun damage and skin cancer. Humid weather may worsen the acne due to excess
 sweating.
- Long hair may irritate acne; tying it back may help.

>Further Information

National Institutes of Health: www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001876 Talk Acne Internet: www.talkacne.com

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