ACNE: Cause and Treatment

Acne occurs when there is an excessive amount of oil production by the oil glands, a roughening or thickening of the ducts that carry oil to the surface of the skin, the presence of bacteria, and the body’s inflammatory response to this condition. The debris in the ducts themselves and dried oil partially plug the ducts causing either a partial obstruction (blackhead) or a complete plug (whitehead). The oil trapped within the duct is broken down into irritating fatty acids by the action of skin bacteria. This causes the formation of pimples and small skin abscesses, such as boils.

Almost all teenagers get acne at some point in time, with more than 90% having some acne of varying degrees. Although there are many myths about the cause of acne, the following are the main factors:

- **Hormones** – During adolescence, there is an increase in sex hormones, called androgens. This increase causes an increase in oil production, especially on the face, back, and upper chest. For young women, increased hormone levels with menstruation are also a factor.

- **Heredity** – If others in your family have or have had acne, it is more likely you will have a tendency to get acne.

Other factors that could make acne worse include some medications and stress.

Acne is not caused by diet, therefore it is unnecessary to restrict fried food, chocolate, or other foods thought to be attributed to acne. It is not caused by dirt. The tops of blackheads are black because of a chemical reaction of the oil plug with air. No matter how much you wash your face, you can still have acne. In actuality, if you wash you face too much, or harshly, you could cause your acne to become worse. It is not communicable (cannot “catch” or “give” it to someone) and is not caused by sexual activity.

**Treatment**

It is important to understand that acne is a self-limiting disorder that will last a few years, usually improving spontaneously by 20 to 25 years of age. Treatment will not cure acne, but will suppress it until it gradually resolves itself. A person’s skin and the type of acne will dictate the treatment regime.

- **Soap** – The skin should be washed twice each day, especially before bed. A mild soap, such as Dove® should be used. Do not scrub the skin harshly, causing further irritation.
- **Hair** – The hair should be washed daily. Refrain from using oily hair products and be weary of things that rub on the skin, such as headbands and hats.

- **Benzoyl peroxide** – This helps kill skin bacteria, unplug the oil ducts, and heal pimples. It is available over the counter in strengths ranging from 2.5% to 10%. Start slowly with a lower strength lotion once a day, at bedtime. After a week, if the skin is not red or peeling, it may be applied twice daily. An amount the size of a pea should be enough to cover most of the face. Apply to the entire area, not just on current blemishes. Avoid the areas around the eyes and mouth. If skin becomes reddened or peels, reduce the amount or strength of the lotion. Use sun block or sunscreen when skin will be exposed to sunlight as these products cause the skin to be more susceptible to sunburn.

- **Avoid popping pimples.** This can make acne worse and could lead to scarring.

- **Avoid applying oily or greasy substances to the face.** This can make acne worse by blocking oil glands. If possible, use water based cosmetics and wash them off before bed.

If the above methods are not effective, discuss other options with your doctor. He may prescribe Retin-A, which is a stronger product than Benzoyl peroxide. Other options may also include topical or oral antibiotics. In addition, a referral may be made to a dermatologist for further evaluation or treatment.

Be diligent in following your treatment regime and use the treatment as directed. Remember, it takes three to six weeks to see any improvement once you have started treatment.

Sources:
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