ACNE

What is acne?

Acne is a common skin condition that causes pimples on the face, neck, shoulders, chest and back. Acne can be emotional stressful and depending on its severity can lead to scarring of the skin.

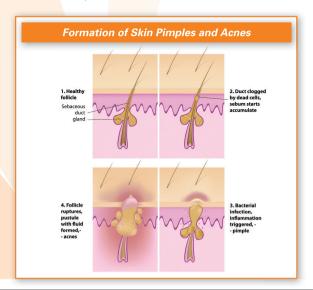
Acne occurs when the hair follicles become clogged with oil or sebum and dead skin cells. Sebum is prevented from leaving the skin through the pores.¹



Acne can appear in different forms which include:2

Noninflammatory lesions (Comedones i.e. whiteheads and blackheads)

Comedones are created when the openings of hair follicles become clogged and blocked with oil secretions, dead skin cells and sometimes bacteria. When comedones are open at the skin surface, they're called blackheads because of the dark appearance of the plugs in the hair follicles. When comedones are closed, they're called whiteheads and are slightly raised, skincoloured bumps.



Inflammatory lesions

The blocked sebum-filled hair follicle promotes **over-growth** of a bacterium, *Propionibacterium acnes*, which is normally present in the hair follicle. *Propionibacterium acnes* breaks down the sebum into substances that irritate the skin, producing skin eruptions which we commonly refer to as acne pimples. Inflammatory lesions take the form of:

Papules

These are small raised bumps that signal inflammation of infection in the hair follicles. Papules may be red and tender



Pustules (pimples)

These are red, tender bumps with white pus at their tips



Nodules

These are large, solid, painful lumps beneath the surface of the skin. They're formed by the build up of secretions deep within hair follicles.



Cysts

Cysts are painful, pus-filled lumps beneath the surface of the skin. These boil-like infections can cause scars







What causes acne?

Three factors contribute to the formation of acne.
These are:

- the overproduction of oil or sebum.
- the irregular shedding of dead skin cells resulting in irritation of the hair follicles of your skin.
- the build up of bacteria

Factors that may worsen acne²

Factors that can trigger or aggravate an existing case of acne include:

Hormones

Male hormones called androgens increase in both boys and girls at the time of puberty. They cause the sebaceous glands to enlarge and make more sebum. Hormonal changes related to pregnancy and the use of oral contraceptives can also affect sebum production.

Medications

Drugs containing corticosteroids, androgens or lithium are known to cause acne

Diet

Certain dietary factors, including dairy products and carbohydrate-rich foods e.g. bread, chips, which increase blood sugar may trigger acne.

Symptoms

While most acne occurs on the face, it is also common on the shoulders, back and upper chest. Three levels of acne severity are identified - *mild, moderate and severe*.







Mild Acne

Develop a few noninflamed blackheads or whiteheads (less than 20)

or A moderate number of mildly irritated pimples

Moderate Acne

Have more comedones and pimples and sometimes larger more inflamed pimples or pustules

Severe (deep/cystic) Acne

Have numerous large, red, painful pus-filled lumps or nodules that sometimes even join together under the skin into giant, oozing abscesses

Treatment¹

General care of acne is very simple:

- Affected areas should be gently washed once or twice a day with mild soap
- Cosmetics should be water-based as very greasy products can make acne worse
- Although there are no restrictions on specific foods that a person can eat, a healthy balanced diet should be followed.





Beyond these routine measures, acne treatment depends on the severity of the condition.

Mild acne

Topical drugs are applied to the skin. They work by killing bacteria (antibacterials) or alternatively they dry up or unclog the pores. Antibacterials that are commonly used include the 2 antibiotics clindamycin and erythromycin, and benzoyl peroxide. Other topical drugs are salicylic acid, resorcinol and sulphur. They work by drying out the pimples and cause slight peeling, but are less effective than the antibiotics or benzoyl peroxide. If topical antibacterials fail, doctors may prescribe other drugs that help to unclog the pores like tretinoin. While tretinoin is very effective it is irritating to the skin and also makes the skin more sensitive to sunlight.

Moderate acne

Oral antibiotics that are given by mouth are usually prescribed to treat moderate acne. Examples of these antibiotics include tetracycline, doxycycline, minocycline and erythromycin.

Severe acne

When oral antibiotics are not effective in treating severe acne, oral isotretinoin is considered the best treatment. Isotretinoin is the only drug that can potentially cure acne. It is generally prescribed for 20 weeks. While isotretinoin is highly effective, it can have serious side effects such as harming a developing foetus. As a result, women taking isotretinoin must use strict contraceptive measures to ensure that they do not fall pregnant. Other acne treatments may be used for specific people. For example, a woman with severe acne that worsens with her menstrual period, may be prescribed an oral contraceptive by her doctor.

Ask your healthcare professional for SA's No. 1 Isotretinoin product³

For complete acne control⁴

REFERENCES: 1. Porter RS, editor. The Merck Manual Home Health Handbook 2009: 1296-9. John Wiley & Sons, Inc., Hoboken, New Jersey 2009. ISBN 978-1-11811-542-8. 2. Acne - Disease and Conditions. Mayo Clinic. Available from URL: http://www.mayoclinic.org/diseases-conditions/acne/basics/definition/con-20020580?p=1 (Accessed 29.01.2014). 3. IMS Data August 2012. 4. Approved Oratane package insert. 5. Shaw G. 10 Myths and Facts About Adult Acne. WebMD. Available from URL: http://www.webmd.com/skin-problems-and-treatments/acne/features/10-myths-and-facts-about-adult-acne (Accessed 30.01.2014). LP 587 01/2014

