

## Acne

### What are the aims of this leaflet?

This leaflet has been written to help you understand more about acne. It tells you what it is, what causes it, what can be done about it and where you can find out more about it.

### What is acne?

Acne is a very common skin condition characterised by comedones (blackheads and whiteheads) and pus-filled spots (pustules). It usually starts at puberty and varies in severity from a few spots on the face, neck, back and chest, which most adolescents will have at some time, to a more significant problem that may cause scarring and impact on self-confidence. For the majority it tends to resolve by the late teens or early twenties, but it can persist for longer in some people. Acne can develop for the first time in people in their late twenties or even the thirties. It occasionally occurs in young children as blackheads and/or pustules on the cheeks or nose.

### What causes acne?

The sebaceous (oil-producing) glands of people who get acne are particularly sensitive to normal blood levels of certain hormones, which are present in both men and women. These cause the glands to produce an excess of oil. At the same time, the dead skin cells lining the pores are not shed properly and clog up the follicles. These two effects result in a build up of oil, producing blackheads (where a darkened plug of oil and dead skin is visible) and whiteheads.

The acne bacterium (known as *Propionibacterium acnes*) lives on everyone's skin, usually causing no problems, but in those prone to acne, the build-up of oil creates an ideal environment in which these bacteria can multiply. This triggers inflammation and the formation of red or pus-filled spots. Some acne can be caused by medication given for other conditions or by certain contraceptive injections or pills. Some tablets taken by body-builders contain hormones that trigger acne and other problems. Acne can very rarely be caused by problems with hormones. If you develop unusual hair growth or hair loss, irregular periods or other changes to your body, then mention this to your doctor in case it is relevant.

## **Is acne hereditary?**

Acne can run in families, but most cases are sporadic and occur for unknown reasons.

## **What does acne look like and what does it feel like?**

The typical appearance of acne is a mixture of the following: oily skin, blackheads and whiteheads, red spots, yellow pus-filled pimples, and scars. Occasionally, large tender spots or cysts may develop that can eventually burst and discharge their contents or may heal up without bursting. The affected skin may feel hot, painful and be tender to touch. Not all spots are acne, so if there is something unusual about the rash it may be advisable to consult your doctor.

## **How is acne diagnosed?**

Acne is easily recognised by the appearance of the spots and by their distribution on the face, neck, chest or back. However, there are several varieties of acne and your doctor will be able to tell you which type you have after examining your skin. The most common type is 'acne vulgaris'.

## **Can acne be cured?**

At present there is no 'cure' for acne, although the available treatments can be very effective in preventing the formation of new spots and scarring.

## **How can acne be treated?**

If you have acne but have had no success with over-the-counter products then it is probably time for you to visit your doctor. In general, most treatments take two to four months to produce their maximum effect

### **Acne treatments fall into the following categories:**

- Topical treatments, i.e. those that are applied directly to the skin
- Oral antibiotics, i.e. tablets taken by mouth
- Oral contraceptive pills
- Isotretinoin capsules
- Other treatments

### **Topical treatments**

These are usually the first choice for those with mild to moderate acne. They should be applied to the entire affected area of the skin (e.g. all of the face) and not just to individual spots, usually every night or twice daily. Consult your doctor if they cause irritation of the skin; it may help to use the treatments less often, at least temporarily, to help overcome this problem. There are a variety of active antiacne agents, such

as benzoyl peroxide, antibiotics (e.g. erythromycin, tetracycline and clindamycin), retinoids (e.g. tretinoin, isotretinoin and adapalene), azelaic acid and nicotinamide.

### **Oral antibiotic treatment**

Your doctor may recommend a course of antibiotic tablets, usually erythromycin or a type of tetracycline, which is sometimes taken in combination with a suitable topical treatment. Antibiotics need to be taken for at least two months, and are usually continued until there is no further improvement, for at least six months. Some should not be taken at the same time as food, so read the instructions carefully.

### **Oral contraceptive treatments**

Some types of oral contraceptive pills help females who have acne. The most effective contain a hormone blocker (for example, cyproterone) which reduces the amount of oil the skin produces. It usually takes at least three to four months for the benefits to show. Although they may not be taken for this reason, the pills also help to prevent conception. As they prevent ovulation, they may be less suitable in young teenage girls where ovulation is not well established. These tablets increase the risk of blood clots which can be dangerous. This is a greater risk for people who smoke, are overweight or have others in the family who have had blood clots.

### **Isotretinoin**

This is a powerful and highly effective treatment for acne which continues to benefit most patients for up to two years after a course of treatment. However, it has the potential to cause a number of serious side effects and can be prescribed only under the supervision of a consultant dermatologist. Isotretinoin can harm an unborn child. The government medicine safety agency (MHRA) has strict rules for doctors prescribing this medicine. Women enrol in a pregnancy prevention programme and need to have a negative pregnancy test prior to starting treatment. Pregnancy tests will be repeated every month during treatment and five weeks after completing the course of treatment. Effective contraception must be used for at least four weeks before treatment, whilst on treatment, and for at least four weeks afterwards.

There are concerns that isotretinoin may cause depression and suicidal feelings. Acne itself often makes people feel depressed so this can be complicated. Details about any personal and family history of depression or other mental illness should be discussed with your own doctor and dermatologist prior to considering treatment with isotretinoin.

Most courses of isotretinoin last for four months during which time the skin usually becomes dry, particularly around the lips. Regular application of a lip moisturiser is usually helpful. Often, acne becomes a little worse for a few weeks before

improvement occurs. The improvement is progressive throughout the course of treatment, so do not be disappointed if progress seems slow.

It should be emphasised that many thousands of people have benefited from treatment with isotretinoin without serious side effects. Further information on isotretinoin can be found on the BAD website, for both males and females.

### **Other treatments**

There are many forms of light and laser therapy for inflammatory acne but these forms of treatment have given mixed results when studied and are usually ineffective in the treatment of severe inflammatory acne. Laser resurfacing of facial skin to reduce post-acne scarring is an established technique requiring the skills of an experienced laser surgeon. Laser treatment should not be done for at least one year after completing a course of isotretinoin.

### **Self care (What can I do?)**

- Try not to pick or squeeze your spots as this usually aggravates them and may cause scarring.
- However your acne affects you, it is important to take action to control it as soon as it appears. This helps to avoid permanent scarring and reduces embarrassment. If your acne is mild it is worth trying over-the-counter preparations in the first instance. Your pharmacist will advise you.
- Expect to use your treatments for at least two months before you see much improvement. Make sure that you understand how to use them correctly so you get the maximum benefit.
- Some topical treatments may dry or irritate the skin when you start using them. If your face goes red and is irritated by a lotion or cream, stop treatment for a few days and try using the treatment less often and then building up gradually.
- Make-up may help your confidence. Use products that are oil-free or waterbased. Choose products that are labelled as being 'non-comedogenic' (should not cause blackheads or whiteheads) or non-acnegenic (should not cause acne).
- Cleanse your skin and remove make-up with a mild soap or a gentle cleanser and water, or an oil-free soap substitute. Scrubbing too hard can irritate the skin and make your acne worse. Remember blackheads are not due to poor washing.
- There is little evidence that any foods cause acne, such as chocolate and "fast foods"; however, your health will benefit overall from a balanced diet including fresh fruit and vegetables.

## Where can I get more information?

Web links to detailed leaflets:

The Acne Academy is a UK charity set up by healthcare professionals to help people with acne and contains links to many information sheets.

Tel: 01707 226 023

Web: <http://www.acneacademy.org> 4 Fitzroy Square, London W1T 5HQ

Tel: 020 7383 0266 Fax: 020 7388 5263 e-mail: [admin@bad.org.uk](mailto:admin@bad.org.uk)

Registered Charity No. 258474

<http://www.dermnetnz.org/acne/index.html>

<http://www.skincarephysicians.com/acnetnet>

For details of source materials used please contact the Clinical Standards Unit ([clinicalstandards@bad.org.uk](mailto:clinicalstandards@bad.org.uk)).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: its contents, however, may occasionally differ from the advice given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

BRITISH ASSOCIATION OF DERMATOLOGISTS

PATIENT INFORMATION LEAFLET

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