

Acne

by Alison M Layton, Diane Thiboutot
and Vincenzo Bettoli

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***Indispensable
Guides to
Clinical
Practice***

Acne

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Introduction

Acne (Figure 1) is one of the commonest skin diseases that community physicians and dermatologists have to treat. Confirming the diagnosis is rarely a problem and, given the wide spectrum of treatment options, there really is no reason why most patients with acne cannot be helped enormously. However, the vast number of therapeutic options now available can pose difficulties for the prescribing clinician in deciding which is the preferred treatment. The purpose of this guide is to highlight several features of the disease, including etiology and clinical presentation, while also reviewing the treatments available along with their respective modes of action and potential adverse effects.

Successful management of acne requires careful selection of antiacne agents according to clinical presentation and individual patient needs. A thorough patient evaluation should take into account acne severity and



Figure 1 A typical example of common acne.

predominant lesion type as well as age, skin type, lifestyle, motivation and the presence of coexisting conditions. Incorporation of all these factors, along with appropriate education when choosing a specific treatment program, can enhance patient compliance and satisfaction, which is essential for the success of acne treatment. The recent introduction of several new antiacne agents affords greater flexibility in treatment. The availability of new treatment options to complement the existing armamentarium should help to achieve the successful therapy of greater numbers of acne patients, ensure improved tolerability and fulfill patient expectations.

Acne can affect persons of all ages, including neonates, infants, prepubescent children, adolescents and mature adults. However, acne is most prevalent and most severe during adolescence.

Neonatal acne (Figure 1.1) is characterized by the development of comedones, and inflammatory papules and pustules which generally affect the cheeks. It is thought to result from the production of androgens by the fetal adrenal glands and testes. Neonatal acne usually resolves within the first 3 months of life, but can persist for up to a year.

In females, acne becomes active again at the time of adrenarche, generally around 8 to 10 years of age. The onset of acne in this period has been associated with elevated levels of dehydroepiandrosterone sulfate (DHEAS), a weak adrenal androgen. Most prepubertal acne is characterized by the presence of comedones and few inflammatory lesions.

Acne vulgaris typically begins around puberty and early adolescence; thus it tends to present earlier in females than males, reaching peak severity in females at about the age of 17, and at 19 or 20 years in



Figure 1.1 Neonatal acne.

Lesion types

Acne vulgaris is the most common type of acne. Other types are described later in this chapter. The individual lesions of acne vulgaris are divisible into three types:

- non-inflamed lesions
- inflamed lesions
- scars.

Non-inflamed lesions are called comedones. Comedones may be microscopic (microcomedones) (Figure 4.1) or evident to the eye as blackheads or whiteheads (Figure 4.2). Microcomedones, the precursor lesions of acne, may develop into whiteheads or blackheads.

- Whiteheads (closed comedones) are small spots (about 1 mm in size) and are usually white or cream in color. Macrocomedones are large closed comedones, usually > 2 mm in diameter, and are usually white in color and palpable (Figure 4.3).

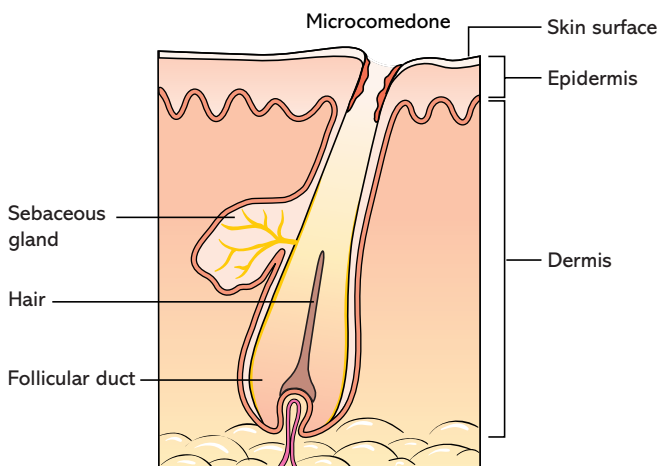


Figure 4.1 A microcomedone, the precursor lesion of acne.

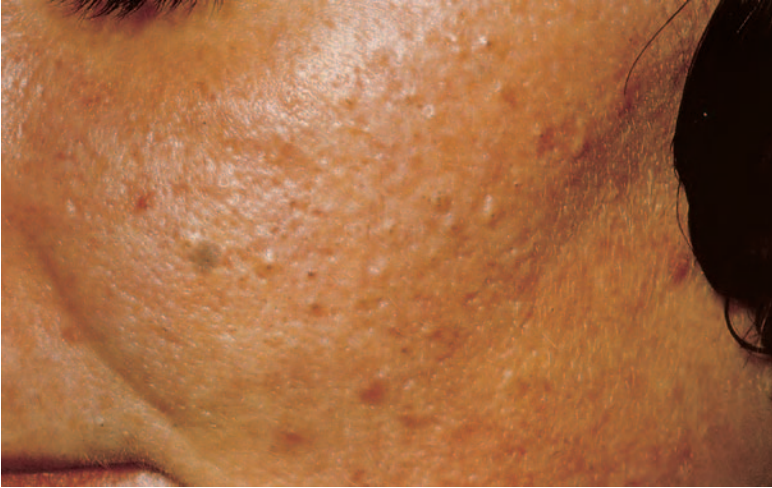


Figure 4.2 Mixed non-inflammatory lesions: blackheads and whiteheads.

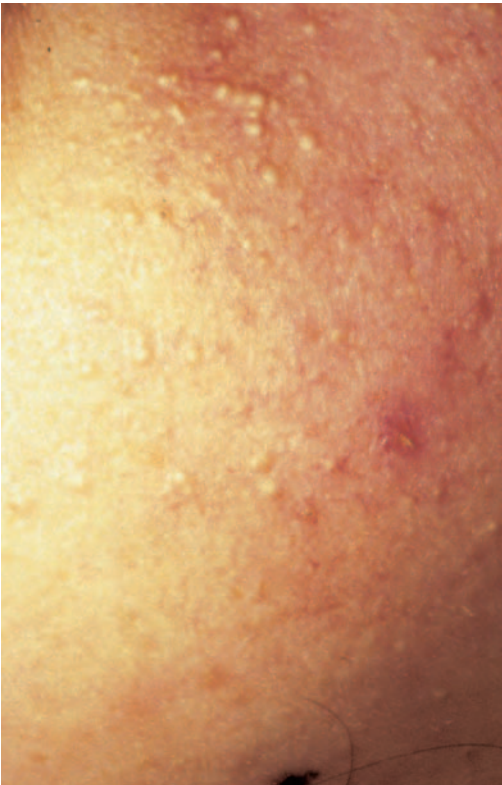


Figure 4.3
Macrocomedones: closed
comedones of diameter
> 2 mm.