

〈教育セミナー〉

ニキビ，赤ら顔に迫る～脂腺を取り巻く最新科学～

ニキビの発症メカニズム，治療，予防

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**The Etiology, Treatment, and Prevention of Acne**

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**Abstract**

Acne is a chronic skin condition that affects patient quality-of-life. More than 90% of the Japanese population experiences acne at some point in their lifetime. Comedones, which are caused by excess sebum secretion and hyperkeratosis in the infundibulum, appear in the first stage of acne. The second stage involves inflammatory eruptions mainly caused by *Propionibacterium acnes*. Benzyl-peroxide (BPO), and fixed combination products of BPO and clindamycin, became available in Japan in 2015. BPO acts on both comedones and inflammatory eruptions, and it can be used for maintenance therapy because it does not induce antibiotic-resistant *P. acnes*. To achieve early results and to prevent the emergence of antibiotic-resistant bacteria, the revised guidelines for the treatments of acne in Japan recommend combination therapy with adapalene, antibiotics, and BPO, including fixed-combination topical agents, in the acute inflammatory phase. Once inflammation has improved, comedones treatment should be continued with adapalene and/or BPO in the maintenance phase to achieve further improvement and to prevent recurrence. The acute phase lasts approximately 3 months, and antibiotics should not be used for maintenance therapy. Sometimes, inflammatory eruptions can result in hypertrophic and atrophic scars that cannot be treated completely. Early aggressive treatment is important to prevent scars. Skin care and cosmetics are also important in the treatment of acne as well as to avoid aggravation. The guidelines recommend twice-daily face washing with a suitable cleanser. Non-comedogenic moisturizers should be used by patients who have dry skin and by those who need to avoid the adverse effects of adapalene and BPO. There is no reliable evidence connecting certain foods and acne, and we should not uniformly restrict specific foods. There is compelling evidence demonstrating the efficacy of azelaic acid and chemical peels with glycolic acids in the treatment of acne. Camouflage also helps acne patients improve their quality of life. To improve acne treatments, more evidence is needed regarding the integration of treatments and skin care.

**Key words:** acne, guideline, benzoyl peroxide, combined therapy, maintenance therapy.