

〈教育セミナー〉  
(アクネケア最前線)

## 抗 菌 剤 に よ る 治 療

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### Antibiotic Therapy for Inflammatory Acne

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#### Abstract

Antibiotic therapy for inflammatory acne is very common. Systemic administration of roxithromycin and minocycline, and topical application of nadifloxacin and clindamycin are the most commonly used agents in Japan. Systemic treatment is used only when topical treatment alone is inadequate or unsuitable. The mechanism of action of antibiotics for inflammatory acne is antibacterial effect against *Propionibacterium acnes* (*P. acnes*). As for tetracyclins and macrolides which are protein synthesis inhibitors, they have anti-inflammatory properties as well as strong antibiotic potency against *P. acnes*. For example, the mechanisms by which macrolide antibiotic roxithromycin affects inflammatory acne include: [1] antibacterial action; [2] inhibition of production of bacterial lipases and neutrophil chemotactic factor by *P. acnes*; [3] inhibition of the production of active oxygen species by neutrophils; and [4] inhibition of adhesion molecules expressed on endothelial cells.

**Key words:** inflammatory acne, antibiotic therapy, topical treatment, systemic treatment.