

## Acne Treatment Strategies 2023



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### KEYWORDS

• Acne treatments • Topical • Systemic • Antibiotics • Hormonal • Procedural • Lasers

### KEY POINTS

- More than 90% of adolescents develop acne, often leading to a substantial mental and psychological burden [1]. Although acne has the potential to resolve with treatment, some can produce permanent scarring [2].
- Treatments consist of topical medications, oral medications, and procedural therapies. Though, mild acne is commonly treated with topical therapies, moderate-to-severe acne may require systemic agents often in combination with topical therapies [3].
- Standard topical treatments include both prescription and over-the-counter options. Available in distinctive strengths and formulations, topical retinoids are the foundation of topical prescription treatments. In addition, topical clindamycin, dapsone, and clascoterone are other anti-acne agents and require prescriptions in the United States. Benzoyl peroxide, azelaic acid, and salicylic acid are topical anti-acne products readily accessible both over the counter and by prescription.
- Oral medications consist of antibiotics, isotretinoin, and hormonal treatments in post-menarchal females. Antibiotic resistance should be considered when prescribing antibiotics. Isotretinoin, although greatly effective, is a known teratogen and has a side effect profile that is often concerning to patients and is burdensome to prescribe given the regulatory constraints (ie, iPledge). Patient compliance to isotretinoin proper use guidelines should be considered before prescribing isotretinoin. Hormonal treatments such as oral contraception pills and spironolactone may be helpful for some women with acne.
- Many lasers have been available for potentially treating acne, but past studies are of low quality with little conclusive evidence that they are effective. However, newer, more successful devices are recently available and show promise.

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Nature of acne:

- Acne is an exceedingly common disorder of the pilosebaceous glands, with more than 90% of adolescents developing acne [1].
- The pathophysiology of acne involves abnormal follicular keratinization, sebum production, inflammation, and *Cutibacterium acnes* activity [4].
- Acne has the possibility of resolving with treatment; however, even with treatment, acne can result in permanent scarring [2]. Though, there is

a greater likelihood of acne scarring if treatment is delayed [5].

### TREATMENTS

The mainstay of treatments includes topical, oral, and procedural therapies. As shown in clinical studies, both oral and topical treatments may take weeks to months for results to be evident [6]. Although mild acne is commonly treated with topical therapies, moderate-to-severe acne may require systemic agents

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