Shobha Rao, MD,
Mehreen A. Malik, MD
University of Texas Southwestern Family Practice Residency

Laura Wilder, MLS
University of Texas Southwestern Medical Center Library, Dallas

What is the best treatment for mild to moderate acne?

EVIDENCE-BASED ANSWER

For mild comedonal acne, monotherapy with topical retinoids is the treatment of choice (strength of recommendation [SOR]: **A**). For moderate comedonal and mild to moderate papulopustular acne, combination therapy with either benzoyl peroxide or topical retinoids (adapalene [Differin], tazarotene [Tazorac], tretinoin [Retin-A]) plus topical antibiotics (erythromycin or clindamycin) is proven most effective (SOR: **A**). Six to eight weeks should be allowed for most treatments to work before altering the regimen (SOR: **A**).

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CLINICAL COMMENTARY

Get patients (or parents) to agree to an adequate trial before declaring failure

Fortunately, we have excellent first-line therapies for mild to moderate acne. A greater challenge is getting patients (or parents) to agree to an adequate trial of these agents, and then sharing objective data on progress before hastily declaring failure.

We must remember the significant psychosocial impact that "zits" have on our adolescent patients. Validating this central concern and providing lay education on acne pathophysiology help get patients to agree to 6 weeks of therapy before judging the effectiveness of treatment. Comparative digital photographs and repeat counts of inflammatory lesions and comedones at the follow-up visit help significantly in objective progress assessment and fostering therapeutic adherence.

Timothy Mott, MD
US Navy, Pensacola, Fla

Evidence summary

Acne vulgaris is the most common cutaneous disorder, affecting about 45 million people in the United States. Five to 6 million acne-related visits are made to physicians in outpatient offices each year.[1]

For mild noninflammatory (comedonal) acne, the preferred option is monotherapy with topical retinoids. Randomized controlled trials (RCTs) have proven the efficacy of tretinoin, an older retinoid for comedonal acne.[2] In one RCT, patients were randomly assigned to 1 of 3 treatment groups, each having 33 enrollees: patients in the first group received 0.1% tazarotene gel as twice daily application; the second group received 0.1% tazarotene gel in the evening and vehicle gel in the morning; the third group received vehicle gel twice daily. By 12 weeks, the first and second groups achieved significantly greater improvement in acne than the third group, based on mean percentage reduction in noninflammatory lesions (46% and 41% vs 2%; *P*=.002) and inflammatory lesions (38%

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and 34% vs 9%; P=.01).[3] Another 12-week RCT of 237 patients with mild to moderate acne demonstrated superior efficacy with 0.1% adapalene cream over placebo (P<.05).[4] While most studies did not compare the use of one retinoid vs another, a recent meta-analysis of placebo-controlled trials concluded that topical tazarotene is more effective in treating mild comedonal acne than adapalene or tretinoin, although it may be more likely to cause skin irritation.[6,7]

A systematic review evaluating the evidence for treatment of acne found that combining topical antibiotics with topical retinoids or benzoyl peroxide is effective for moderate noninflammatory (comedonal) and mild to moderate inflammatory (papulopustular) acne.[7] Because of its antibacterial and anti-comedogenic properties, benzoyl peroxide is preferred to retinoids for inflammatory acne. Another benefit of using benzoyl peroxide with antibiotic cream is its potential to reduce antibiotic-associated resistance to *Propionibacterium acnes*.[7,8]

No comparative trials or meta-analyses compare efficacy of different combination therapies. A recent narrative review of clinical trials concluded that clindamycin plus benzoyl peroxide was more effective in reducing inflammatory lesions than monotherapy with either agent alone, and was similar in efficacy to benzoyl peroxide/erythromycin combination.[8] Similarly, combination therapy with clindamycin and adapalene was superior to clindamycin alone in improving mild to moderate acne.[9] Both 1% clindamycin and 2% erythromycin were comparable in reducing inflammatory and noninflammatory lesions for patients with moderate acne.[10]

Studies are ongoing for topical tetracycline, topical isotretinoin, and light and laser therapy in treatment of mild to moderate acne.

FAST TRACK

Comparing photos and counting lesions and comedones at the follow-up visit help patients stick to their therapy

Recommendations from others

An expert review stated that treatment of acne should be individualized for best results.[7] A report from the Global Alliance to Improve Outcomes in Acne states that topical retinoids are appropriate first-line therapy for all forms of acne and should be combined with topical antimicrobial therapy when inflammatory lesions are present.[11]

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