BEST PRACTICES IN: ACNE MANAGEMENT

INTRODUCTION

Acne vulgaris is a chronic inflammatory dermatologic disease characterized by open and/or closed comedones (blackheads and whiteheads) and inflammatory papules, pustules, and nodules that can appear on the face, neck, and trunk. It is the most common skin disease in the United States, affecting 40 to 50 million people. Although acne is typically associated with adolescence, it may occur in prepubescent children and often continues into adulthood. In fact, nearly 100% of children 12 to 17 years of age suffer at least mild acne.[1]

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Acne has a profound psychosocial impact. Patients with acne frequently suffer from low self-esteem, anxiety, depression, anger, suicide ideation, and an overall impaired quality of life.[2,3] The societal impact of acne is equally as profound, with annual total direct and indirect costs estimated at $2.5 billion and $619 million, respectively.[1] More than two thirds of the direct costs of acne are spent on medications.

Acne is a follicular disease, the pathophysiology of which is characterized by abnormal follicular keratinization, increased production of sebum, proliferation and colonization of *Propionibacterium acnes,* and inflammation.[2,4] Effective treatment of acne targets more than one pathophysiologic pathway, and combination therapy with topical and/or systemic antimicrobial agents, retinoids, and hormonal agents are recommended for routine management.[5]

Topical retinoids and benzoyl peroxide, alone or in combination, are standard first-line treatments. However, the use of benzoyl peroxide (BPO)-containing products is limited by concentration-dependent cutaneous irritation, dryness, and erythema. This is particularly an issue among pediatric patients who have sensitive skin. The advent of treatment-related irritation can adversely affect patient adherence—already among the greatest challenges to successful treatment, particularly in children—and hinder good patient outcomes.

Products that combine topical antimicrobials with low concentrations of BPO have demonstrated an efficacy profile comparable to that of products with high BPO concentrations. A fixed combination of clindamycin phosphate (CL) 1.2% and BPO 2.5% gel (CL/BPO 2.5%) gel applied once daily demonstrated, in phase III studies, efficacy superior to either agent alone and a favorable tolerability profile.

CL/BPO 2.5%

CL/BPO 2.5% is formulated as an alcohol-free aqueous gel. In two phase III studies, CL/BPO 2.5% was compared with CL 1.2% gel alone, BPO 2.5% gel alone, and vehicle.[6] The two double-blind, randomized studies enrolled a total of 2,813 patients older than 12 years with moderate or severe acne and evaluated inflammatory and noninflammatory lesion counts and tolerability.

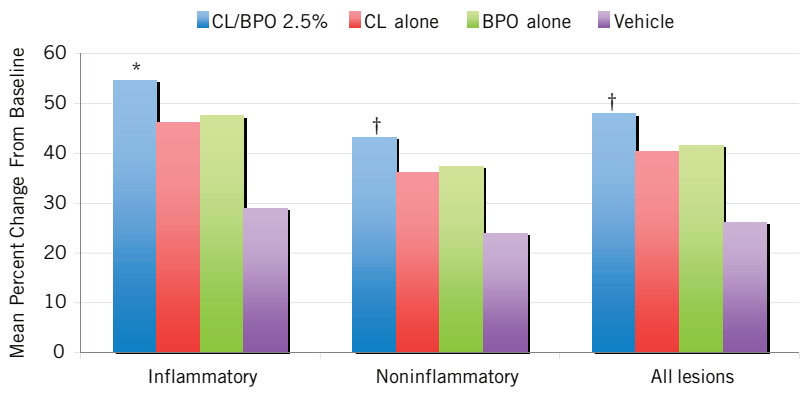
At the study's 12-week end point, CL/BPO 2.5% had produced statistically significantly greater reductions in lesion counts than did either agent alone or vehicle. There was a 54.6% reduction in total inflammatory lesions with CL/BPO 2.5% versus 46.2% with CL alone and 47.5% with BPO alone ($P<0.001$). There was a 29% reduction in the vehicle arm ($P<0.001$ vs CL/BPO 2.5%).[6] CL/BPO 2.5% was also associated with a 43.2% reduction in noninflammatory lesions, which was statistically greater than the 36.2% and 37.4% mean reductions observed with CL and BPO monotherapy, respectively ($P<0.001$ vs CL; $P=0.001$ vs BPO). The mean reduction with vehicle was 24% ($P<0.001$ vs CL/BPO 2.5%). Likewise, mean percent reductions in total lesion count were also significantly greater with combination therapy than with either monotherapy or vehicle ($P<0.001$) **(Figure)**.[6]

Overall, CL/BPO 2.5% was very well tolerated. There was no difference in the incidence of adverse events considered possibly, probably, or definitely related to treatment with combination therapy, CL alone, BPO alone, or vehicle (5.9% vs 4.3% vs 5.9% vs 6.1%, respectively). Application-site reactions with CL/BPO 2.5% occurred in 0.1% of patients. No patients treated with CL/BPO 2.5% discontinued treatment because of erythema, scaling, itching, burning, or stinging, and no serious adverse events were considered treatment related. The vast majority (≥97%) of adverse events were of mild to moderate severity.[6]

A recent pooled analysis of two double-blind, randomized trials focused specifically on an adolescent population with moderate to severe disease. These studies enrolled 1,755 patients, 12 to 18 years of age, and randomized them to CL/BPO 2.5%, vehicle, or the individual active ingredients.[7] At the 12-week study end point, CL/BPO 2.5% produced superior reductions in inflammatory and noninflammatory lesion counts than did vehicle ($P<0.001$), CL alone ($P=0.004$), and BPO alone ($P=0.031$). The mean scores for burning and stinging, itching and erythema, and scaling with CL/BPO 2.5% were 0.0, 0.1, and 0.2, respectively. The results confirm that the once-daily, low-concentration CL/BPO gel is effective and well tolerated in pediatric patients. Analysis of clinical trial data suggests that the combination is effective in adolescent patients with skin of color, as well.[8]

Figure

Mean Percent Reductions in Lesion Counts From Baseline to Week 12



*$P<0.001$ vs CL, BPO, and vehicle.
†$P<0.001$ vs CL and vehicle; $P=0.001$ vs BPO.
CL=clindamycin phosphate; BPO=benzoyl peroxide.

Source: Used with permission from Thiboutot et al.[8]

CL/BPO 2.5% IN CLINICAL PRACTICE

Patient adherence is one of the greatest obstacles to successful acne treatment. Many effective products are available, but consistent and correct use is needed to produce efficacy. Maintaining adherence is especially challenging among pediatric patients, but there are several strategies for maximizing adherence in children, teenagers, and adults.

With pediatric and teenaged patients, it is first important to ensure that it is the patients, and not the parents, seeking treatment. If the patients are not independently seeking treatment, they will not be motivated to take the necessary steps for a successful outcome. If the patients are motivated, empowering them as active participants in treatment selection may also help improve adherence.

When selecting treatment, clinicians can consider several factors that may help patient adherence, as well. Combination products such as CL/BPO 2.5% are more convenient and easier to use than are multiple single agents. They also do not preclude the use of additional topical or systemic therapies when indicated. Tolerability is also a consideration.

Finally, there is also the need to prescribe responsibly. Although monotherapy with topical antimicrobial agents can induce a temporary acne remission, it is associated with the emergence of antimicrobial-resistant *P. acnes* strains.[5] BPO suppresses bacterial growth via a different mechanism of action, and it helps suppress and eliminate resistant *P. acnes*.

CONCLUSION

Acne is a common skin disorder associated with a profound psychosocial and economic impact. CL/BPO 2.5% offers patients effective and convenient treatment that is well tolerated.

INDICATION AND IMPORTANT SAFETY INFORMATION

Acanya Gel is indicated for the topical treatment of acne vulgaris in patients 12 years of age or older. Do not prescribe if the patient has shown hypersensitivity to clindamycin, benzoyl peroxide, or to lincomycin. Acanya Gel is contraindicated in patients with a history of regional enteritis, ulcerative colitis, or antibiotic-associated colitis. Discontinuation is recommended if significant diarrhea, bloody diarrhea, severe abdominal cramping, or colitis (including pseudomembranous colitis) develops. Clindamycin taken orally or through IV may result in severe colitis, which may result in death. Anaphylaxis, as well as other allergic reactions leading to hospitalizations, has been reported in postmarketing use of products containing clindamycin/benzoyl peroxide. If a patient develops symptoms of an allergic reaction such as swelling and shortness of breath, they should be instructed to discontinue use and contact a physician immediately. Patients should be advised to avoid contact with the eyes or mucous membranes and to minimize sun exposure following the application of Acanya Gel. In controlled clinical trials, the following application-site adverse reactions (active vs vehicle) occurred in less than 0.2% of patients treated with Acanya Gel: application-site pain (0.1% vs 0.0%), application-site exfoliation (0.1% vs 0.0%), and application site irritation (0.1% vs 0.3%).

For Full Prescribing Information visit www.acanyagel.com

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