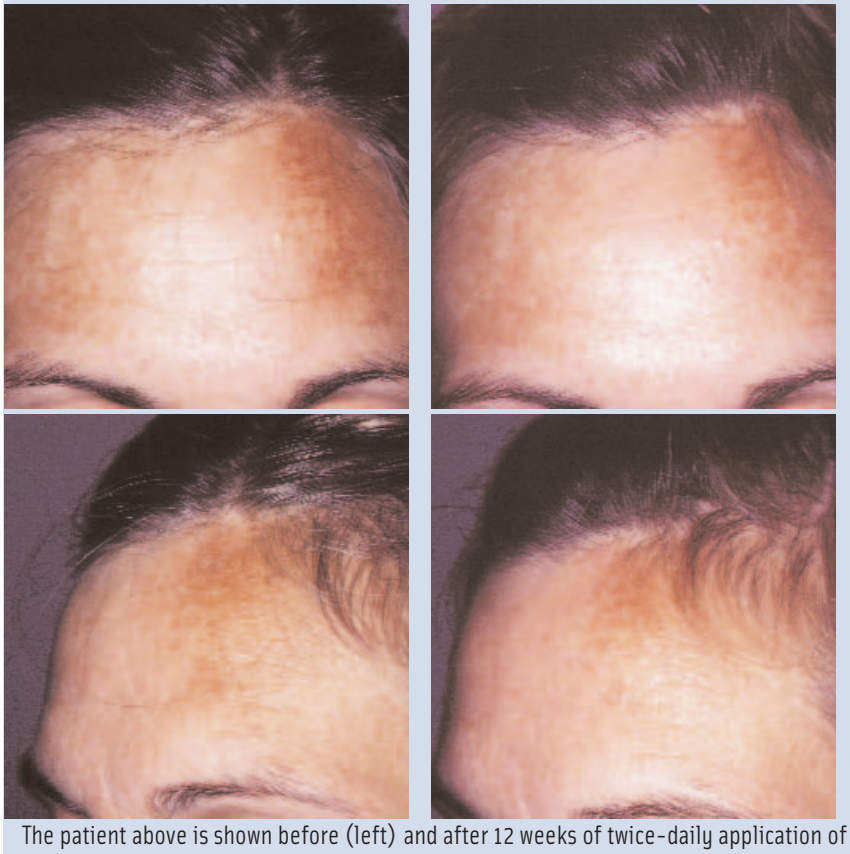
By Joseph Bikowski, MD

Managing Melasma with Azelaic Acid Gel

A case demonstrates how a therapy typically used for acne and rosacea can benefit patients with melasma.

Melasma is a relatively common form of hyperpigmentation, often triggered by such factors as solar radiation, darker skin, genetic predisposition, pregnancy, and use of certain medications. Women, particularly those with Fitzpatrick skin types III or IV through VI, are most commonly affected; approximately 90 percent of patients are female.[1-5]

The standard of care for melasma has been 4% hydroquinone cream, used alone or in combination with other agents (eg, tretinoin, topical steroids, chemical peels, etc).[6-9] However, side effects can be a concern. In particular, local inflammation and contact dermatitis, postinflammatory hyperpigmentation, hypopigmentation of normal skin, and ochronosis are associated with topical hydroquinone therapy.[1,10-11] More recently, the possibility of an association between hydroquinone and carcinogenesis has been raised.[12] As a result, the FDA has requested safety studies from suppliers of hydroquinone products. In the absence of such studies, which have not yet been provided, the FDA has proposed withdrawing all over-the-counter 2% hydroquinone products as well as all prescription-strength hydroquinone products not studied as investigational new drugs.[6]



Photos courtesy of Joseph Bikowski, MD

The patient above is shown before (left) and after 12 weeks of twice-daily application of azelaic acid gel 15%.

Table 1. Grading Melasma

The Melasma Severity and Area Index commonly used in clinical trials is complex. The score derives from an equation that weighs grades for darkness and homogeneity and the percentages of involvement (10-30%) for various facial areas involved (forehead, right malar, left malar, and chin). The Index may be too cumbersome for use in daily practice, but many dermatologists may "score" patients using one element of the assessment scale—usually darkness. According to MASI guidelines, the darkness of melasma compared to normal skin is graded as follows:

0=normal skin color without evidence of hyperpigmentation;

1=barely visible hyperpigmentation;

2=mild hyperpigmentation;

3=moderate hyperpigmentation;

4=severe hyperpigmentation.

– Indian J Dermatol Venereol Leprol 2006;72:315-21

A number of other therapies have also been used to treat melasma, including azelaic acid, tretinoin, topical steroids, kojic acid, and chemical peels. In clinical trials, azelaic acid 20% cream has shown comparable efficacy and better safety results compared with hydroquinone.[13-15] Although azelaic acid 20% cream is available in the United States, the 15% gel formulation should result in even greater efficacy. Skin absorption studies demonstrate that, despite the lower concentration, the gel formulation releases more azelaic acid—perhaps as much as eight times as much active ingredient—into the skin than does the cream.[16]

Demonstrated Benefit

In our practice, we often use 15% azelaic acid gel as first-line treatment for melasma. The patient shown here, a 39-year-old woman, presented with brown facial discolorations that had appeared over the summer. She was not pregnant, was not aware of having an allergy to any specific medication, and was currently taking birth control pills and naproxen (Aleve). After being diagnosed with melasma (2+ melasma; See table.) in a bilateral presentation on the forehead and temples, 15% azelaic acid gel was prescribed for twice daily application. She was instructed to use azelaic acid gel in conjunction with a cleanser, a moisturizer, and a sunscreen.

The patient was seen again at four weeks. She noted that the discoloration had subsided, although there had been an interim worsening. This worsening may be related to time spent outside performing yard work without using sunscreen. The 15% azelaic acid gel b.i.d. regimen was continued. At the end of 12 weeks, the patient was seen again. Her skin was much improved, with at least a 50 percent reduction of hyperpigmented lesions.

A Safe, Effective Option

Topical azelaic acid gel 15% has proven to be a safe and effective topical treatment option for our patients with melasma. Patients typically apply the agent twice daily for 12 weeks, though therapy may continue indefinitely. Additionally, non-irritating skin care practices and the use of appropriate broad-spectrum sun protection are essential to support therapeutic success. ■

Dr. Bikowski is a consultant and serves on the speakers bureau and the advisory board for Intendis.

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NEW In Your Practice

Heads Up. A popular psoriasis treatment is now available in a suspension formulation to treat the scalp. Warner Chilcott and LEO Pharma recently announced that the FDA approved the New Drug Application for Taclonex Scalp (calcipotriene 0.005% and betmethasone dipropionate 0.064%) Topical Suspension for the treatment of moderate to severe scalp psoriasis vulgaris in adults. Look for Taclonex Scalp to launch in the second half of 2008.

Publish or Perish. Looking for any easy way to share information and produce content specifically for your patients? Vivacare may have a solution. The company recently launched a self-publishing tool. They say the new feature allows physicians to easily edit, customize, and self-publish content to their own online patient library, giving control of the content patients receive. For more information, visit www.vivacare.com.

Having their Fil. Research supports that mutations in the filaggrin gene (FLG) confer major susceptibility to eczema and to asthma associated with eczema (J Allergy Clin Immunol 121: 872- 877). In a cohort study, genotyping showed that 8.8 percent of children carried one or two copies of the FLG null alleles R501X and/or 2282del4. Because these two mutations had previously been shown to have essentially identical biochemical consequences, the study aggregated them for analytical purposes. The FLG null alleles were found to strongly predispose carriers to eczema at all ages. Though associations were strong for nonatopic eczema, the odds ratios were notably stronger for atopic eczema. Among children with eczema, the condition tended to persist longer in those with FLG mutations.

Coming Soon. Keep an eye out for new products from Medimetriks Pharmaceuticals, Inc., a newly formed company dedicated to the dermatology and podiatry markets founded by dermatology industry veterans. For information, visit www.medimetricks.com.