Topical Tazarotene in Acne Vulgaris: Treatment Approaches

Dina N. Anderson, MD; Valerie D. Callender, MD; James Q. Del Rosso, DO; Emil A. Tanghetti, MD; Lee T. Zane, MD

Topical tazarotene is effective and well tolerated in the treatment of acne vulgaris and has been used successfully in diverse patient populations. However, because factors such as patient skin type and climate may influence its optimal use and frequency of application, treatment approaches often differ according to the populations in which tazarotene is used. The authors review their prescribing practices and special considerations for women, African Americans, patients living in dry climates, adolescents, and Asian Americans.

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Acne vulgaris is a widespread condition, affecting as many as 17 million persons in the United States alone.[1] Acne is most prevalent during adolescence and young adulthood, but it may develop at any stage of life. In addition, clinical presentation and morphologic evidence of acne appear to vary by age and by racial origin.[2,3] Even though differences in patient characteristics may necessitate adjustments in treatment practices, few articles scientifically address acne management in relation to race, skin type, or sexual maturity.[4]

As discussed elsewhere in this supplement, topical tazarotene is efficacious and well tolerated in a wide variety of patients with acne.[5] In this article, the authors describe the clinical use of topical tazarotene as an acne therapy in a broad-spectrum of patients (Figures 1–3).

Dr. Anderson is from the Department of Dermatology, State University of New York Downstate Medical Center, Brooklyn. Dr. Callender is from the Callender Skin and Laser Center, Mitchellville, Maryland. Dr. Del Rosso is from the Department of Dermatology, University of Nevada School of Medicine, Las Vegas. Dr. Tanghetti is from the Center for Dermatology and Laser Surgery, Sacramento, California. Dr. Zane is from the Department of Dermatology, University of California, San Francisco.

Dr. Anderson has served as a speaker and advisory board member for Allergan, Inc. Dr. Callender has been a consultant, advisory board member, and speaker for and has received research grants from Allergan, Inc, and Galderma Laboratories, LP. Dr. Del Rosso has been a consultant and a speaker or advisory board member for Allergan, Inc; Galderma Laboratories, LP; Medicis, The Dermatology Company; and Stiefel Laboratories, Inc. Dr. Tanghetti has been a consultant and speaker for Allergan, Inc. Dr. Zane reports no conflict of interest.

Dina N. Anderson, MD

Practice Characteristics—Dr. Anderson treats a wide variety of patients in New York, New York, but her patients with acne are predominantly women.

Approach to the Use of Topical Tazarotene in Women With Acne—Dr. Anderson first tells the patient to stop using drying toners and scrubs and to use a nonirritating makeup remover and a noncomedogenic moisturizer. A moisturizing base aids in the induction of topical retinoid therapy. In addition, Dr. Anderson recommends the daily use of a micronized physical sunblock in patients with scarring or hyperpigmentation.

For patients with inflammatory acne and cyclic flares, Dr. Anderson may prescribe oral contraceptives or antiandrogens. In contrast, she considers daily oral antibiotics for patients without an underlying hormonal influence. Intralesional triamcinolone 1.5 mg/cc is offered for immediate resolution of inflammatory cysts. Dr. Anderson frequently prescribes tazarotene 0.1% cream for application 3 times a week and may alternate it with a topical sulfur suspension every other night.

In patients with noninflammatory acne, Dr. Anderson prescribes topical tazarotene 0.1% cream or gel, using the latter in patients with oily skin. She recommends a mild benzoyl peroxide wash for morning use and a mild soapless cleanser for bedtime (after the removal of makeup and before the application of the topical retinoid).

After 4 weeks, Dr. Anderson may increase the frequency of topical tazarotene to nightly. However, if the patient has sensitive skin, Dr. Anderson keeps the patient on a 3-times-a-week schedule. In patients with predominantly noninflammatory acne, she may add topical glycolic or salicylic cosmeceuticals at subsequent visits to augment the therapy. Extractions can be performed on loosened comedones after 4 weeks of retinoid use.

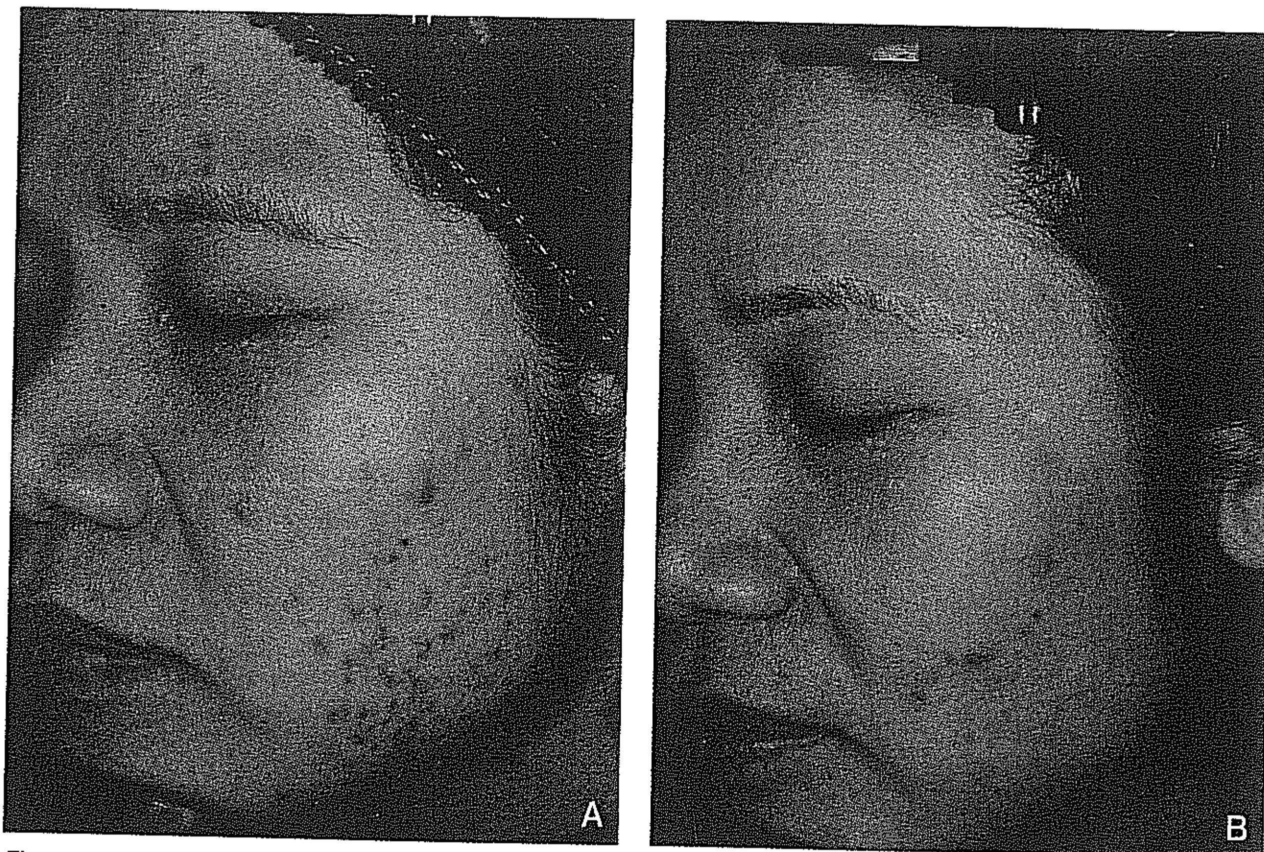

Figure 1. Typical improvement with topical tazarotene 0.1% gel at baseline (A) and after 12 weeks (B) of treatment.

Dr. Anderson assesses her patients every 6 to 8 weeks, at which time she may modify treatment, depending on the improvement that has occurred and the development of irritation. If improvement without irritation has occurred, she will consider increasing the frequency of tazarotene application to maximize effectiveness, while tapering off the oral antibiotics. Then, if scarring is present, Dr. Anderson will add superficial peels or microdermabrasion twice a month. She also discusses laser and light therapies with the patient. She reserves isotretinoin therapy for severe cases and in the rare event of a minimal response to traditional therapy. For these patients, Dr. Anderson uses tazarotene after the course of treatment with isotretinoin has ended to prevent recurrence of acne. She also uses tazarotene in many patients as a maintenance treatment to improve skin texture, dyschromia, and scarring. In Dr. Anderson's experience, women enjoy a wide range of benefits from long-term use of topical retinoids and may continue to use these agents indefinitely for optimal skin health.

Valerie D. Callender, MD

Practice Characteristics—Dr. Callender treats a wide variety of patients in Mitchellville, Maryland, but her typical patient with acne is an African American woman whose chief complaint is postinflammatory hyperpigmentation (PIH).

Approach to the Use of Topical Tazarotene in Patients With Acne—At the time of their first visit, Dr. Callender's patients are likely to be using any number of over-the-counter (OTC) skin care products and medications. As a result, Dr. Callender's first intervention is to assume control of the patient's skin care regimen and halt the use of all OTC treatments. Regardless of the severity of the acne, the patient begins with a mild soap-free cleanser, as well as a moisturizer that contains a sunscreen with a sun protection factor of 15.

Dr. Callender initiates treatment with tazarotene 0.05% cream applied every night. She prescribes the gel formulation less often because of concerns regarding irritation. After 2 or 3 weeks, she switches patients to a stronger concentration (tazarotene 0.1% cream) for an additional 3 weeks. If the patient has moderate to severe acne, Dr. Callender is likely to give an oral antibiotic in conjunction with the tazarotene; in mild cases, she may prescribe topical clindamycin–benzoyl peroxide gel.

After 6 weeks, Dr. Callender reassesses her patients and makes any necessary adjustments to

regimen. In patients with complete clearance of acne, use of topical retinoids daily or every other day may be effective in maintaining remission.

Special Considerations in Patients Living in Dry Climates—When initiating treatment, Dr. Del Rosso's goal is to control the acne while minimizing irritation. He discontinues astringent cleansers and scrubs because they impair epidermal barrier function and increase irritation. He instructs patients on the importance of maintaining a thin layer of moisturizer on areas of dryness or peeling, even in the absence of topical medication use, to maintain barrier function and limit transepidermal water loss. This is especially important in a dry desert climate, where skin is forced to work in overdrive to maintain barrier function.

Emil A. Tanghetti, MD

Practice Characteristics—Dr. Tanghetti, Sacramento, California, treats a wide variety of patients in both clinical practice and clinical research settings. He has a great deal of experience in treating adolescents and adults with acne.

Approach to the Use of Topical Tazarotene in Patients With Acne—At the initial visit, Dr. Tanghetti instructs his patients to discontinue the use of astringents; use a mild nonabrasive nonsoap cleanser; and wash gently with warm (not hot) water. Dr. Tanghetti instructs patients with sensitive skin to use a moisturizing cream. He advises patients to wait at least 25 to 30 minutes after cleaning their skin or bathing before applying a small amount of a topical retinoid. If dryness is associated with the therapy, Dr. Tanghetti tells patients to use an emollient after washing. Skin moisture affects absorption and, consequently, the tolerability of topical retinoids. The perinasal region, oral commissures, and lateral aspect of the chin are particularly challenging areas to treat; because of nasal and oral secretions, they tend to have higher ambient humidity than other areas of the face. For this reason, Dr. Tanghetti treats these areas carefully. Actinic keratoses, more likely in adults than in adolescents, may become apparent during the initial period of topical retinoid treatment. As part of good general skin care practice, Dr. Tanghetti advises patients to use sunscreen and avoid excessive UVB exposure. If the patient is a candidate for microdermabrasion, Dr. Tanghetti discontinues the use of tazarotene for 1 to 3 days after treatment. If the patient is a candidate for a chemical peel, Dr. Tanghetti waits for complete re-epithelialization to occur before resuming treatment with topical retinoids.

Dr. Tanghetti closely monitors his patients during the retinization period in the first 4 to 6 weeks of therapy. He starts treatment with lower-strength tazarotene cream or gel and increases (or decreases) the strength according to tolerability. Patients with sensitive skin show increased tolerability with tazarotene 0.05% cream and adapalene or tretinoin gel. If an irritant dermatitis develops, Dr. Tanghetti recommends the vigorous use of emollients and instructs the patient to take a 1- to 3-day period of abstinence from the therapy. Dr. Tanghetti also will consider alternate-day therapy, depending on the effectiveness of the current treatment schedule during the first 1 to 2 months of use. This regimen generally allows resumption of the topical retinoid after the dermatitis has cleared.

Special Considerations in Adolescent Patients—Because the bathing habits of adolescents often vary widely, and because skin moisture affects the tolerability of treatment, Dr. Tanghetti counsels adolescents on applying their medication according to their bathing schedule. He asks patients who bathe at night to apply retinoids in the morning and advises patients who are accustomed to bathing in the morning to apply retinoids before bedtime. In patients who bathe twice a day, Dr. Tanghetti tells patients to apply the retinoid no sooner than 25 to 30 minutes after bathing and to make sure that the skin is completely dry.

Lee T. Zane, MD

Practice Characteristics—Dr. Zane runs an acne referral clinic at the University of California San Francisco and sees a wide range of patients with varied disease severity. Dr. Zane sees a large number of Asian American patients, ranging in age from teenagers to adults.

Approach to the Use of Topical Tazarotene in Patients With Acne—At the initial visit, Dr. Zane takes a thorough acne-related personal history and family history and performs a physical examination. The personal history includes assessment for atopic diathesis and skin sensitivity. In female patients, Dr. Zane takes a menstrual history. He discusses previous and current therapies and encourages patients to minimize the use of adjunctive OTC treatments. While the patient-specific therapeutic strategy ultimately depends on individual patient assessment, Dr. Zane thinks that topical tazarotene can be a useful part of the treatment regimen and that tazarotene 0.05% cream fits well into the retinoid ladder in moderate to severe inflammatory acne or comedonal acne, with every-other-night dosing (advancing to nightly, as tolerated), often in conjunction with an oral antibiotic.

Dr. Zane believes the use of topical tazarotene can be especially useful in several situations. (1)

The preisotretinoin period: patients with severe acne, for whom isotretinoin therapy is potentially considered, are often well served with an adequate trial of topical tazarotene 0.1% cream before it is decided whether to escalate to isotretinoin. (2) The postisotretinoin period: patients who are at greatest risk for recurrence following isotretinoin therapy (eg, those who clear very quickly after starting isotretinoin, those who become very oily soon after stopping isotretinoin, and those who have had multiple courses of isotretinoin in the past) often benefit from maintenance therapy with tazarotene. (3) Greasy, severe, comedonal acne: in those patients with very oily skin and widespread comedones that require repeated extraction procedures, topical tazarotene 0.05% or 0.1% cream—or gel if tolerated—can be particularly useful for minimizing the comedonal burden.

Special Considerations in Asian American Patients—Although many Asian Americans may have fair-colored skin, their strong potential for PIH is reflected in their dark hair and eyes. Dr. Zane believes that thorough counseling about the excoriation of lesions and about differentiating active acne lesions from postlesion erythematous macules is crucial. Likewise, he includes a frank discussion about the potential risk for hyperpigmentation from corrective procedures for acne scarring. Dr. Zane always recommends sun avoidance and strongly emphasizes protection measures when he prescribes photosensitizing agents. Many of Dr. Zane's patients find that their PIH improves with continued retinoid therapy.

A substantial percentage of Asian American patients have an atopic diathesis, a predilection that may be suggested by a history of asthma, atopic dermatitis, and seasonal allergies. Many of these patients complain of sensitive, easily irritated skin. Dr. Zane gives special consideration to these patients when a regimen of retinoid therapy is formulated, especially if it is combined with benzoyl peroxide–containing medications. If tolerability prevents the use of a retinoid in combination with benzoyl peroxide–containing medications, Dr. Zane often favors prescribing the retinoid.

Summary

Topical tazarotene may be used successfully in diverse patient populations, with equivalent efficacy and tolerability across patient populations. Ethnic differences and diversity of skin types are not impediments to effective use of topical retinoids, including tazarotene. Adjustments based on patient characteristics may be necessary to optimize treatment, but some practices should be used in all patients for optimal treatment:

- Patients should discontinue the use of abrasive or harsh cleansers and drying toners or astringents.
- As part of good skin care practice, patients should use a sunscreen and avoid prolonged exposure to direct sunlight. It is a misconception, however, that patients should not use topical retinoids during the summer months. With proper sunscreen, topical tazarotene is routinely and successfully used year-round.
- Tazarotene should be applied to dry skin.
    - Because the perinasal region, oral commissures, and lateral aspect of the chin tend to be moist, these areas should be treated carefully.
- The frequency of retinoid application should be based on the patient's response; if irritation develops, short periods of treatment abstinence (ie, treatment holidays) should be encouraged.
- If irritation develops, it is generally within the first few weeks of therapy (ie, the retinization period). Care should be taken to educate patients about the retinization process and how to minimize irritation.

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