Management of Acne Vulgaris, Rosacea, and Perioral Dermatitis

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Acne vulgaris and rosacea are two of the most common disorders encountered in office-based dermatology practices.[1] Despite their common nature, therapeutic challenges exist when managing both these cutaneous disorders. Among these challenges are difficulty in achieving an initial response to treatment that is quick enough based on the perception of the patient; the inability to often achieve and sustain complete disease clearance; use of over-the-counter (OTC) products or products purchased via the Internet that may produce skin irritation; inadequate education regarding proper adjunctive skin care; and poor adherence with the prescribed therapeutic regimen. Although clinical studies assist us in evaluating the potential value of various therapies, the results achieved and the challenges encountered in real world clinical practice require clinicians to apply principles related to both the art and science of medicine. This article discusses some practical tips that have been successfully used in the management of acne vulgaris and rosacea by the authors based on data reported in the literature, from widespread clinical experience, or both.

Tip No. 1: Facial Dermatoses and Sensitive Skin: Prime the Face First

Rosacea

Sensitive skin is common in patients with both papulopustular and erythematotelangiectatic rosacea.[2-4] Increased central facial transepidermal water loss (TEWL) has been observed in patients with both papulopustular and erythematotelangiectatic rosacea, with the magnitude of TEWL being greater in the latter group.[5] Signs and symptoms of sensitive skin, such as dryness, scaling, stinging, and pruritus have been reported in approximately one-third to one-half of patients with papulopustular rosacea before the initiation of treatment.[2,4,6] Since these characteristics were reported at the baseline visit, they reflect signs and symptoms inherent to the disease state itself.

Studies have shown that use of appropriate adjunctive skin care reduces signs and symptoms of rosacea, such as erythema, scaling, stinging, burning, and pruritus.[2,6-8] Use of a gentle cleanser and moisturizer is an integral component of the management plan in both papulopustular and erythematotelangiectatic rosacea.[2,6-9] Integration of adjunctive skin care can be completed in a manner that is analogous to lacquering the outside surface of a wooden house. The priming of the wood is analogous to the skin care that is used, and subsequent application of lacquer is analogous to the application of medication. As seen with many patients presenting with rosacea, even those who may have been prescribed appropriate prescription therapies, improper skin care is a common cause of cutaneous irritation. The authors often suggest that patients discontinue their current skin care products and only use a designated gentle cleanser and moisturizer on their face for the first 5 to 7 days. This allows time for repair and hydration of the epidermal barrier.[9,10] After 5 to 7 days, topical therapy may then be initiated, with the additional benefit of reduced potential for cutaneous irritation that may be associated with topical agents.[2,6,7] This is a rational approach to rosacea because it primes sensitive skin by assisting in epidermal barrier repair and TEWL reduction, stressing the importance of proper skin care, and not just the use of topical medication, as an integral component of rosacea management.

Acne Vulgaris

Many patients with acne vulgaris also initially present

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with signs and symptoms of cutaneous irritation due to use of inappropriate skin care or OTC acne products, or cutaneous irritation seen in association with the use of products such as benzoyl peroxide (BP) or topical retinoids (Figure). Consistent integration of a gentle cleanser and moisturizer into the topical therapy regimen mitigates the signs and symptoms of cutaneous irritation observed in patients being treated for acne.[7,11]

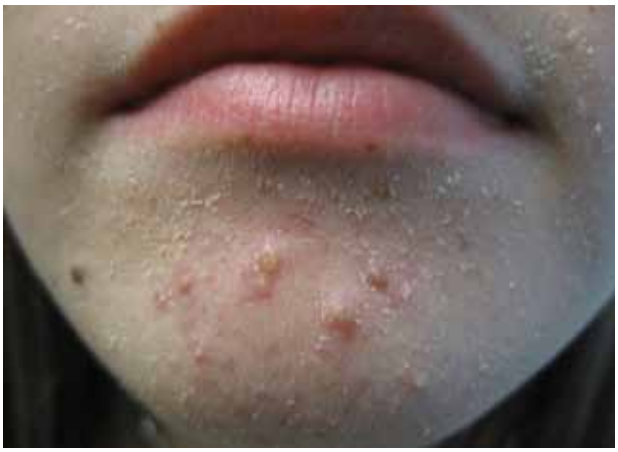
Perioral Dermatitis

Perioral dermatitis, a disorder seen most commonly in young females, is characteristically easily irritated by a variety of facial cleansers, cosmetic products, and topical medications. Stinging and burning are often noted by affected patients. The magnitude of TEWL has been shown to be higher in perioral dermatitis than in papulopustular and erythematotelangiectatic rosacea.[5] A suggested regimen observed by the authors that is helpful in managing perioral dermatitis includes avoidance of topical medications, use of a gentle cleanser and moisturizer, and treatment with anti-inflammatory–dose doxycycline 40 mg once daily (30 mg of immediate-release and 10 mg extended-release capsules once daily). Anti-inflammatory–dose doxycycline is approved by the US Food and Drug Administration for the treatment of papulopustular rosacea, but has also been demonstrated anecdotally to be effective for perioral dermatitis.[12,13] An advantage of anti-inflammatory dose doxycycline is a lack of antibiotic effect, which results in lack of vaginal yeast overgrowth and secondary vaginal candidiasis.[12]

Tip No. 2: Initiate Topical Combination Therapy from Outset in Acne Treatment

Topical combination therapy is commonly used in the management of acne vulgaris.[14-16] Most commonly, this includes use of a topical antimicrobial agent, such as BP and clindamycin, and a topical retinoid, such as tretinoin, adapalene, or tazarotene. When topical agents for acne vulgaris are initiated, especially in combination, skin tolerability is a major concern. Signs and symptoms of cutaneous irritation associated with agents such as BP and topical retinoids (retinoid dermatitis) usually occur within the first 2 to 4 weeks after starting treatment.

Due to advances in vehicle formulation, and in some cases in relationship to the innate properties of a given compound (eg, adapalene), cutaneous tolerability reactions are less common, and when they do occur are often mild and manageable.[17-21] For example, microsphere technology has improved cutaneous tolerability of both tretinoin and BP.[19,20] The development of aqueous-based gels has improved the tolerability of several



Patient with retinoid dermatitis characterized by pink erythema and fine scaling seen within the first 1 to 2 weeks after initiation of topical retinoid therapy.

topical medications used to treat both acne vulgaris and rosacea. Excipients used as components of vehicle formulations may include humectants and occlusive emollients that can assist in reducing cutaneous irritation.[21] Other advances that appear to improve cutaneous tolerability of topical medications include incorporation of crystalline tretinoin in a controlled range of particle size in an aqueous gel formulation of clindamycin and tretinoin, and solubilization of dapsone in an aqueous gel formulation using diethylene glycol monoethyl ether.[22-24]

Available data with topical antimicrobial agents, specifically BP and clindamycin used in combination with a topical retinoid, support the concomitant use of these agents from the outset of therapy.[25-27]

Use of BP 5% and clindamycin 1% in the morning, with a topical retinoid at bedtime, initiated together from the outset of treatment, produces greater reduction in acne lesions at 4, 8, and 12 weeks as compared with use of a topical retinoid alone, or delaying use of the topical retinoid.[25-27] With the availability of more tolerable formulations of acne medications, clinically relevant cutaneous tolerability reactions proved to be uncommon using this approach.

Tip No. 3: Topical Combination Therapy for Truncal Acne Vulgaris

Truncal acne vulgaris has been reported to affect approximately 50% of patients presenting with facial acne vulgaris, with less than 3% presenting with truncal involvement alone.[28] In most cases, the severity of truncal involvement is mild to moderate and is independent of the severity of involvement on the face.[28] A recent study demonstrated that once daily use of a combination topical regimen incorporating a BP 8% creamy wash

and clindamycin 1% foam is effective in many cases of truncal acne vulgaris that are mild to moderate in severity, without the use of an oral antibiotic.[29] Although it was shown that the magnitude in reduction of acne lesions is approximately 10% greater over a duration of 12 to 16 weeks when 100 mg of oral doxycycline daily is used along with the topical regimen, it may be preferred by some patients to use topical therapy alone, especially in cases where an oral antibiotic is deemed unnecessary for treatment on concurrent facial acne, which is usually also present. Sodium sulfacetamide 10% and sulfur 5% foam and BP 8% creamy wash were also shown to be of therapeutic benefit and well tolerated in a patient with truncal acne vulgaris.[30] Therefore, in cases of truncal acne vulgaris that is of moderate severity or less, use of a topical therapy regimen without an oral antibiotic may be a rational approach, at least in some patients.

Conclusion

Management of acne and rosacea warrants the incorporation of practical measures that are gleaned through clinical experience and are not necessarily based on clinical trials, at least in their entirety. A supporting clinical trial is not always available to address every clinical scenario or patient-specific situation. Positive therapeutic outcomes are often based on recommendations that are supported by clinical perspectives observed over time. Clinical trials provide important information; however, they are limited by inclusion and exclusion criteria and the artificial nature of patients being enrolled in such a defined process. Results from well-performed clinical trials are very important to clinicians; however, they do not provide solutions to all clinical situations and sometimes the results are not substantiated by real world clinical experience. This article discusses the incorporation of some practical management tips that are supported by results noted from clinical experience and are based on information suggested in the literature from a defined body of clinical studies.

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