Managing “Non-Traditional” Forms of Acne

One expert weighs in on treatment of atypical cases of acne, from infantile to steroid-induced.

By Ted Pigeon
Associate Editor
Although acne is commonly associated with adolescents and typically occurs on the face, physicians encounter a variety of manifestations of the disease. Acne sometimes appears in infants as well as middle-aged and elderly patients. Moreover, it can be difficult to manage when it presents on different parts of the body, such as the chest, back, and trunk. These examples represent just a few potential cases of “non-traditional” acne that can present dermatologists with challenges in approaching treatment. Ahead, one acne specialist shares her experiences and clinical insights in evaluating therapy in less common presentations of acne.

Infantile Acne

Infantile acne appears to be rare enough that some dermatologists do not encounter it. But there are detailed accounts of it in the literature, and it may lead to more serious problems. In a 2005 study, researchers evaluated occurrences of infantile acne, finding that it is more common in boys and that it occurs primarily on the cheeks. Another recent report in particular observed a 23-month-old boy with persistent acne since six months of age. A hormone evaluation revealed increased levels of dehydroepiandrosterone and testosterone. Ultrasound and abdominal computed tomographic scan also revealed a large adrenal mass consistent with an adrenocortical tumor. The study was not able to conclude whether infantile acne may be associated with such confounding factors in other cases, but it warrants consideration and future research.

According to Julie C. Harper, MD, Assistant Professor of Dermatology at the University of Alabama-Birmingham and founder of the Acne/Rosacea Clinic there, infantile acne often responds to similar treatment as adult acne. Although she admits to having seen few patients with infantile acne, Dr. Harper says that topical retinoids and benzoyl peroxide may offer significant improvement. In the circumstance that patients don't respond to topical agents, Dr. Harper notes that topical or systemic erythromycin may benefit these patients. “In more severe cases, trimethoprim sulfamethoxazole can be used,” she says.

Regarding the use of isotretinoin in pediatric patients, Dr. Harper explains that while she has never prescribed isotretinoin for this indication, she would consider it if there was severe disease that was not responding to other treatment. “The one caveat would be that if acne is that severe in the neonate, I would certainly ensure that there was no underlying endocrine abnormality driving the acne,” she says. In the above-mentioned study, researchers indicate that oral isotretinoin (Accutane, Roche) can be used successfully to treat recalcitrant infantile cystic acne. Moreover, the study describes two patients with infantile acne treated with oral isotretinoin. Doses ranged from 0.2 mg/kg/day to 1.5 mg/kg/day, while the duration of treatment varied from five to 14 months.

If a given circumstance calls for isotretinoin, it's essential to carefully monitor the patients every month because of the many potential side effects reported with isotretinoin. Unfortunately, issues with iPledge may discourage physicians from prescribing it for such atypical patients. But if caution is exercised, then isotretinoin appears to be an effective therapy for infantile acne.

Steroid-Induced Acne

Another type in non-traditional acne is unfortunately far more prevalent: acne associated with steroids. Data has shown that anabolic steroids are abused at an alarming rate, in spite of the known major injurious side effects such as liver damage and cardiovascular changes. With respect to acne, anabolic steroids are highly detrimental, according to Dr. Harper. “Anabolic steroids definitely worsen acne,” she says. “This acne can be quite severe, relatively unresponsive to treatment and associated with scarring.”

Patients may also abuse topical corticosteroids, particularly in efforts to improve acne. At first topical corticosteroids may seem to improve acne. But Dr. Harper reminds that the process is not that simple. “People do sometimes take corticosteroids to improve acne,” she says, though this is not generally recommended. “Use of topical corticosteroids can worsen acne over time with numerous mono-morphous pustules appearing in affected areas.” However, Dr. Harper notes that dermatologists do use intralesional corticosteroid injections for particularly stubborn nodular acne lesions. This can confuse patients in some instances, which can lead to inappropriate use of topical formulations. “Topical steroids, if used inappropriately, may worsen acne and trigger steroid-induced rosacea,” she observes.

Given these potential complications of steroids, physicians have a responsibility to ensure that patients don’t think it’s
acceptable to use certain medications unless otherwise indicated by their physician. In terms of the physician's direct role in deciding on therapies, Dr. Harper explains that it is always productive to take a good history. “This includes determining what patients are applying to their skin and what they are taking orally for acne or any other condition.” Some patients are of course reluctant to admit to using anabolic steroids, she notes. In these instances, says Dr. Harper, “strong counseling regarding the risks of anabolic steroids is certainly in order when there is a high clinical suspicion.”

Patients affected by steroid-exacerbated acne present a treatment challenge. Sometimes, however, the wheels are set in motion. If the steroid can be stopped, by all means do so and sometimes that’s enough, she says. But sometimes it is not possible to immediately withdrawal the agent. If so, Dr. Harper recommends the following: “The treatment is similar to acne vulgaris not induced by steroids: topical retinoids, benzoyl peroxides, and antibiotics.” In instances of severe disease, isotretinoin may be of benefit, notes Dr. Harper. “If there is underlying and unidentified anabolic steroid use, isotretinoin may not be as beneficial as expected, and the acne will quickly reappear after the course of treatment is complete,” she warns.

Not so Ordinary
Although the above-mentioned examples of non-traditional acne do not encompass all forms of acne, they represent circumstances that require different approaches to treatment and counseling. Sometimes, when an atypical acne case unfolds unpredictably, the best approach is to treat it as if it was more traditional. No matter what approach to therapy is employed, it’s important that physicians are ready for more demanding cases of acne should they confront them in practice.

——Julie C. Harper, MD

Truncating Truncal Acne
Truncal acne is always tough! I try to remember that the pathogenesis of acne on the back is the same as it is on the face and therefore my treatment should not be much different. I do like the ease of benzoyl peroxide cleansers but also use leave-on products including benzoyl peroxide/antibiotic combination products and topical retinoids. Systemic antibiotics often improve inflammatory acne on the chest and back, as well, but should never be used as monotherapy. Monotherapy with antibiotics promotes resistance. Antibiotics should always be used in combination with a benzoyl peroxide-containing product.

——Julie C. Harper, MD

Low-Glycemic Diet and Acne
As more studies populate the acne literature, the dialogue regarding the effects of diet on acne is ongoing. One recent study of note, published in the American Journal of Clinical Nutrition, examines the hypothesis that low-glycemic-load diets may improve symptoms of acne. For the study, researchers examined 43 male patients with acne aged 15-25 years for a 12-week, parallel design, dietary intervention incorporating investigator-blinded dermatology assessments. The experimental treatment was a low-glycemic load diet composed of 25 percent energy from protein and 45 percent from low-glycemic-index carbohydrates. Acne lesion counts and severity were measured at baseline and at 12 weeks.

At the endpoint, acne lesion counts and severity had decreased more (-23.5 +/- 3.9) in the low-glycemic group than in the control group (-12.0 +/- 3.5). The experimental diet also resulted in a greater reduction in weight and body mass index. Researchers suggest that nutrition-related lifestyle factors may play a role in the pathogenesis of acne but call for further research “to isolate the independent effects of weight loss and dietary intervention and to further elucidate the underlying pathophysiologic mechanisms.”