Mutilating Facial Acne Conglobata

Wanda M. Patterson, MD, Newark, New Jersey
Adam S. Stibich , MD, Newark, New Jersey
Marek Dobke, MD, PhD, Newark, New Jersey
Robert A. Schwartz, MD, MPH, Newark, New Jersey

Acne conglobata, a severe form of acne vulgaris, often produces pronounced disfigurement. We describe a 23-year-old man with acne conglobata. Although this type of acne is often more marked on the back rather than on the face, our patient was unusual in that it was localized mainly to the cheeks. Conventional medical therapy was ineffective or contraindicated. Radical surgical excision with subtotal removal of cheek skin and subcutaneous tissue was performed with an excellent result.

Acne conglobata (AC) is a member of the follicular occlusion triad, which also includes hidradenitis suppurativa and dissecting cellulitis of the scalp. It is a severe form of acne found mainly in white males.[1] The condition usually appears in the early teens, but unlike other forms of acne, becomes increasingly active in the second to third decades of life.[1-3] It is clinically characterized by multiple inflammatory, tender nodules; cysts; and comedones, which are often accompanied by fistulas, abscesses, phlegmon, and draining sinuses.[1,2,4] It can affect all hair-bearing areas, surpassing the usual acne distribution.[1,4] AC may be especially severe on the back, however the face is usually spared its aggressive nature.[1] This disease often leaves extensive, disfiguring scars.[3] In addition, malignant degeneration may occur in chronic scars of AC.[2,3]

Case Report

A 23-year-old black man was seen with worsening acne that has been present since his teens. He suffered from a number of medical conditions including mental retardation, cerebral palsy, spastic quadriplegia, global developmental delay, and seizure disorder. He has been treated with phenytoin and phenobarbital treatment for his seizures.

From Dermatology and Plastic Surgery, UMDNJ-New Jersey Medical School, Newark, New Jersey.
REPRINT REQUESTS to Dermatology, 185 South Orange Avenue, UMDNJ-New Jersey Medical School, Newark, NJ 07103-2714 (Dr. Stibich).

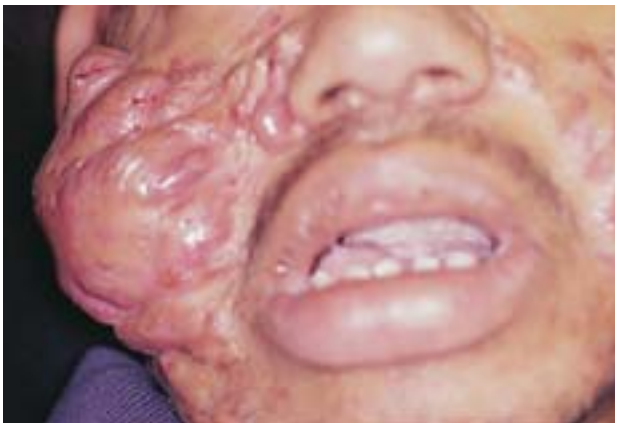

FIGURE 1. Acne conglobata on the cheek.

On physical examination there was extensive erythema and tenderness of both cheeks. Confluent, 1- to 2-cm nodulo-cystic lesions formed impressive masses with underlying draining abscesses and widespread keloidal scarring (Figure 1). Examination of the trunk, axillae, and groin revealed less severe involvement. The patient experienced moderate improvement with conventional topical and systemic acne medications including two short 1-week courses of oral isotretinoin. However, the isotretinoin exacerbated the patient's seizure disorder and was subsequently discontinued.

Minimal improvement of the inflamed, suppurative masses and chronic pain prompted a surgical consultation. It was determined that right- and left-cheek excisions were best completed as two separate procedures. Pharmacologic treatment, excluding oral isotretinoin, was continued for an additional 2 months to assist in the reduction of inflammation before the first operation.

The first stage of surgical intervention involved excision of the right facial mass, which was measured as 14 cm × 7 cm. Block resection of all necrotizing ulcers, fistulas, and internal masses was also performed. This meant virtual removal of the entire cheek. In the second stage, an autologous split-thick-

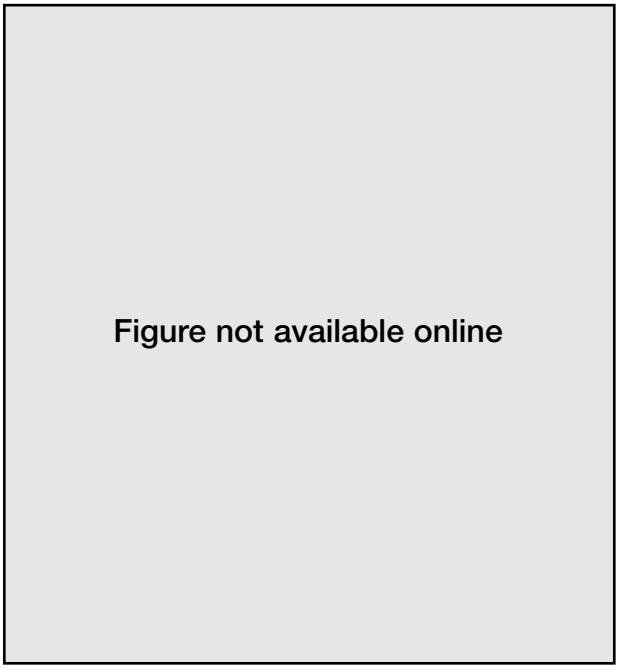

FIGURE 2. Postsurgical resection and graft placement of acne conglobata of the cheek.

ness skin graft harvested from the right thigh was used to close the defect (Figure 2).

Histopathologic examination of the resected mass was consistent with acne conglobata, revealing acute and chronic inflammation surrounding a follicular structure with focal dermal fibrosis. There was no evidence of malignant transformation.

DISCUSSION

Medical treatment of severe cases of acne conglobata had been largely unsuccessful [2,5-7] until oral isotretinoin came into use.[6] The value of isotretinoin treatment is mainly due to its inhibitory effect on sebum production.[8] Most patients achieve remission when given an adequate dose for an appropriate period of time.[8] On occasion, good results may be evident with therapeutic regimens including systemic and intralesional corticosteroids, oral zinc sulfate, X-ray epilation, and cryoprobe treatments.[5-7] Unfortunately, these therapies may not be practical or effective in handling bulky, mutilating acne as seen in our patient.

Excision is the most radical form of acne treatment with skin grafting as the most frequent method of relatively large skin defect repair.[5,7-13] Incisions do not eliminate the disease. Rather, they can be offered only for the palliative treatment of abscesses and fistulas. It is worthy to note that in extreme cases, refractive to standard medical therapies, a dramatic surgical approach is justified. Our case exemplifies this method of treatment.

REFERENCES

1. Plewig G, Kligman AM: Acne Conglobata. In, Acne and Rosacea (Plewig G, Kligman AM, eds), 2nd ed, pp 270-277. New York, Springer-Verlag Berlin Heidelberg, 1993.
2. Weinrauch L, Peled I, Hacham-Zadeh S, *et al*: Surgical treatment of severe acne conglobata. *J Dermatol Surg Oncol* 7: 492-494, 1981.
3. Grösser A: Surgical treatment of chronic axillary and genitocrural acne conglobata by split-thickness skin grafting. *J Dermatol Surg Oncol* 8: 391-398, 1982.
4. Chicarilli ZN: Follicular occlusion triad: hidradenitis suppurativa, acne conglobata, and dissecting cellulitis of the scalp. *Ann Plast Surg* 18: 230-237, 1987.
5. Jeong SJ, Lee CW: Acne conglobata: treatment with isotretinoin, colchicine, and cyclosporin as compared with surgical intervention. *Clin Exp Dermatol* 21: 461-468, 1996.
6. Leyden JJ, Mills OH, Kligman AM: Cryoprobe treatment of acne conglobata. *Br J Dermatol* 90: 335-341, 1974.
7. Leyden JJ: Therapy for acne vulgaris. *N Engl J Med* 336: 1156-1162, 1997.
8. Kaszuba A, Drobnik G, Trznadel-Budzko E, *et al*: The present methods of topical therapy in acne. *Pregl Wojsk-Med* (*Lodz*) 42: 67-73, 2000.
9. Priesack W, Maroske D, Hamelmann H: Ergbnisse der mehrzeitigen chirurgischen Therapie bei ausgeprägter Akne conglobata. *Chirurg* 55: 343-346, 1984.
10. Kaufer C, Axnick E: Operative Therapie der Aknetetrade. *Z Hautkr* 63: 597-609, 1988.
11. Gögler H: Zur chirurgischen Therapie der schweren Akne conglobata. *Zentralbl Chir* 114: 840-843, 1989.
12. Hrabovsky T, Kenyeres M, Drobnitsch I: Szokatlan formában jelentkezö acne conglobata (acne triade) és mütéti megoldása. *Orv Hetil* 128: 1317-1322, 1987.
13. Papadopoulos AJ, Kihiczak G, Schwartz RA: Hidradenitis suppurativa: an update. *Acta Derm Venerol (Ljubljana)* (in press), 2000.