

Nodulo-cystic eruption with musculoskeletal pain

A healthy 17-year-old white patient with mild acne was treated with isotretinoin (Accutane), 40 mg/day. After a month of treatment, the acne got worse and the patient complained of polymyalgia and arthralgia.

An examination revealed numerous nodules and cysts covered by hemorrhagic crusts on his chest and back (FIGURE). The patient had severe muscular tender-

ness with gait disability. Leukocytosis and elevated erythrocyte sedimentation rate (ESR) were found; creatinine phosphokinase was within the normal values.

■ **What is your diagnosis?**

■ **How would you manage this condition?**

Marcelo H. Grunwald, MD
Soroka University Medical Center, Ben Gurion University of the Negev, Beer-Sheva, Israel

Boaz Amichai, MD
Huzot Clinic of Clalit Health Services, Ashkelon, Israel

FIGURE

Nodules and cysts on chest and back



This 17-year-old patient had multiple nodules and cysts covered by hemorrhagic crusts on his chest and back.

CORRESPONDENCE

Marcelo H. Grunwald, MD
Soroka University Medical Center, Ben Gurion University of the Negev, Beer-Sheva, Israel

Marcello@bgu.ac.il

FAST TRACK

**Isotretinoin—
a trigger for acne
fulminans—
is also an effective
treatment**

Diagnosis**■ Acne fulminans**

Acne fulminans is an uncommon complication of acne. It was first described by Burns and Colville in 1959;¹ Plevig and Kligman coined the term.²

Signs and symptoms. It is characterized by sudden onset ulcerative crusting cystic acne, mostly on the chest and back. Fever, malaise, nausea, arthralgia, myalgia, and weight loss are common.

Leukocytosis and elevated ESR are usually found. There may also be focal osteolytic lesions.

Thomson and Cunliffe suggest that the term acne fulminans may also be used in cases of severe aggravation of acne without systemic features.³

The cause of acne fulminans is not clear. However, alteration of type III and IV hypersensitivity to *Propionibacterium acnes*,⁴ circulating immune complexes,⁵ and increased cellular immunity⁶ have been found by some investigators.

Isotretinoin has been identified as a potential trigger.⁵ Some have suggested that isotretinoin increases the fragility of the pilosebaceous ducts, leading to massive contact with the *P acnes* antigen.

Management**■ A treatment and a trigger**

The treatment of acne fulminans consists of supportive care and systemic steroids that are gradually reduced over weeks or months, according to the patient's response. Interestingly, isotretinoin—

a trigger for acne fulminans—is also very effective in its treatment.^{5,7}

Outcome**■ Partial, gradual resolution**

Isotretinoin stopped, prednisone started. In this patient's case, we stopped the isotretinoin and treated him with prednisone, with an initial dose of 40 mg/day. His muscle pain improved.

Dosage tapered. Several attempts to reduce his dosage, however, resulted in a recurrence of pain. Gradual tapering of the steroidal treatment was achieved after 3 months.

Gradual improvement. The acne lesions resolved partially, and gradually, during several months of follow-up. ■

REFERENCES

1. Burns RE, Colville JM. Acne conglobata with septicaemia. *Arch Dermatol* 1959; 79:361–363.
2. Seukeran DC, Cunliffe WJ. Treatment of acne fulminans: a review of 25 cases. *Br J Dermatol* 1999; 141:307–309.
3. Thomson KF, Cunliffe WJ. Acne fulminans 'sine fulminans'. *Clin Exp Dermatol* 2000; 25:299–301.
4. Karnoven SL, Rasanen L, Cunliffe WJ, et al. Delayed hypersensitivity to *Propionibacterium acnes* in patients with severe nodular acne and acne fulminans. *Dermatology* 1994; 189:344–349.
5. Kellet JK, Beck MH, Chalmers RJG. Erythema nodosum and circulating immune complexes in acne fulminans after treatment with isotretinoin. *Br Med J* 1985; 290:820.
6. Gowland G, Ward RM, Holland KY, Cunliffe WJ. Cellular immunity to *Propionibacterium acnes* in normal population and patients with acne vulgaris. *Br J Dermatol* 1978; 99:43–47.
7. Karvonen SL. Acne fulminans: report of clinical findings and treatment of twenty-four patients. *J Am Acad Dermatol* 1993; 28:572–579.

Coming soon in Photo Rounds

- ▶ A new papule and “age spots”
- ▶ Symptomatic misplaced eyelashes
- ▶ Persistent rash in a Hurricane Katrina evacuee

THE JOURNAL OF
**FAMILY
PRACTICE**

www.jfponline.com

