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 tenderness 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?

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.
Diagnosis

**Acne fulminans**

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

**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.

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

Isotretinoin has been identified as a potential trigger. 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. 

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