PEDIATRIC ONCALL
CHILD HEALTH CARE

IMAGES IN CLINICAL PRACTICE

ACNE FULMINANS - A RARE CAUSE OF DISABILITY

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A 15-year-old male was admitted to the pediatric emergency department reporting a one-week history of right thigh pain with disability. He had been previously evaluated and medicated with painkillers, without improvement. Previous history included two months of medication with isotretinoin 20 mg for acne, interrupted one week before.

Physical examination revealed intense muscle pain with functional disability, severe acne (Figure 1), and a tympanic temperature of 38.1ºC. Complete neurological examination was normal. Social isolation and school absenteeism were reported.

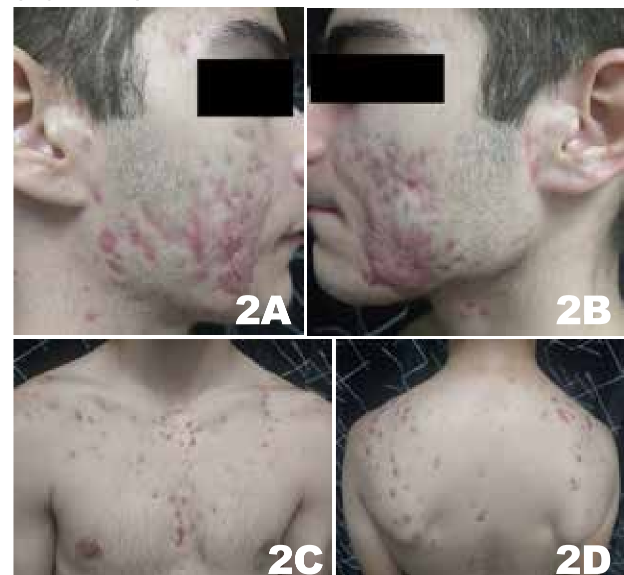
Figure 1. Ulcerated, infected bleeding crusts and painful nodular acne on face (Figures 1A and 1B), chest (Figure 1C) and back (Figure 1D).

Blood tests revealed leukocytosis of 16,800/uL (75.6% of neutrophils and 11.5% of lymphocytes) and C-reactive protein (CRP) of 9.6 mg/dL. Radiographs of the right hip, thigh, and knee displayed normal findings. Dermatology collaboration was requested and the diagnosis of acne fulminans was performed. He was started on oral prednisolone 0.5 mg/Kg/day, combined with intravenous flucloxacillin and topical fusidic acid for the suspected impetiginization.

On day four of hospitalization, he was discharged without disability and maintained his follow-up at the Pediatric Dermatology outpatient clinic.

After four weeks of prednisolone, isotretinoin 0.1 mg/Kg/day was started and after two more weeks, reduction of prednisolone and increase of isotretinoin dose were performed. In six weeks, significant clinical improvement was noticed (Figure 2).

Figure 2. Improvement of active and cicatricial lesions on face (Figure 2A and 2B), chest (Figure 2C) and back (Figure 2D)



What is the diagnosis?

Acne fulminans is a rare and serious form of acne vulgaris that mainly affects adolescent males.[1,2] It may occur in

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association with systemic symptoms (fever, bone pain or arthralgias), laboratory abnormalities (leukocytosis and elevated CRP), and radiologic abnormalities (osteolytic lesions).[2] It can be spontaneous or isotretinoin-induced.[1,2] Diagnosis is clinical.[2,3] Systemic corticosteroids are the mainstay of treatment.[3] Isotretinoin, although paradoxically can represent a trigger for this acne variant, is important for the post-acute inflammatory stage.[3] Systemic antibiotics should only be given for the control of secondary infections.[3]

Increasing awareness of this rare condition among health professionals is critical, because an early identification and treatment can reduce the psychological burden and permanent scarring by this disease.[1]

Compliance with ethical standards
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