Case report

Acute pancreatitis and erythema nodosum associated with azathioprine

S.-W. LAI¹, Y.-C. WANG², C.-H. WANG¹ and T.-Y. HUANG¹

From the ¹Division of Gastroenterology and ²Division of Infectious Diseases and Tropical Medicine, Department of Internal Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei, Taiwan

Address Correspondence to T.-Y. Huang, MD, PhD, Division of Gastroenterology, Department of Internal Medicine, Tri-Service General Hospital, National Defense Medical Center, 325, Sec. 2, Cheng-Kung Road, Taipei 114, Taiwan. email: teinyu.chun@msa.hinet.net

A 57-year-old man presented to the emergency department due to nausea, vomiting and intermittent epigastric pain. One month prior to this, he had an itchy sensation over the scalp, trunk and four limbs with numerous pruritic erythematous to brownish papules and plaques with hyperkeratosis change. He visited a dermatologist and generalized chronic atopic eczema was diagnosed. There was poor response to standard treatment and he was prescribed azathioprine (AZA) (100 mg/day) 2 weeks later.

He denied excessive alcohol intake and had no history of drugs allergy. There was neither history of contact with animals nor of traveling history to tropical areas in the previous 3 months. On admission, the blood pressure was 145/91 mmHg, the pulse was 93 beats and the respirations were 18 times. The temperature was 36.2°C. Physical examinations showed tenderness over the epigastric region without rebounding pain. There were tender lumps with erythematous change over the bilateral pretibial regions (Figure 1). The complete blood count disclosed as following: total WBC count 8.4 x 10³/μl (normal 4 x 10³ to 11 x 10³/μl), hemoglobin 13.8 g/dl (13.5–17 g/dl), platelet count 331 x 10³/μl (150–400 x 10³/μl). The laboratory data revealed lipase level of 1488 U/l (73–393 U/l), amylase level 200 U/l (30–118 U/l), aspartate transaminase level 38 U/l (10–42 U/l), alanine transaminase level 52 U/l (10–40 U/l), lactate dehydrogenase 120 U/l (120–246 U/l), total bilirubin 0.4 mg/dl (0.2–1.3 mg/dl) and serum calcium 7.7 mg/dl (8.3–10.6 mg/dl). The total cholesterol 187 mg/dl (<200 mg/dl) and triglyceride 114 mg/dl (<150 mg/dl) were within normal ranges. Immunological markers survey disclosed normal results of the anti-double-stranded DNA (anti-dsDNA) 1.0 IU/ml (0–200 IU/ml) and negative result of anti-nuclear antibody (ANA) titer. Abdominal computer tomography revealed segmental enlargement of the pancreas with irregular outline (Figure 2). There were no abnormalities of the hepatobiliary system. Acute pancreatitis (Balthazar Grade B) was diagnosed on the basis of the clinical presentation.
presentation, laboratory data and the image findings. Histology of the skin biopsy revealed septal panniculitis with focal aggregated lymphohistiocytic cells in the periphery of the fatty lobules which was compatible with erythema nodosum (Figure 3).

Since there were no obvious precipitating factors, such as alcoholism, trauma, steroids, hypercalcaemia, hyperlipidemia, hypertriglyceridemia, infection or autoimmune disease, the clinical presentations indicated AZA-induced acute pancreatitis. We discontinued the AZA use immediately. The patient recovered well after supportive treatment with fluid resuscitation and bowel rest. The serum lipase level declined to 252 U/l 7 days later. He was discharged 10 days later without sequela. On follow-up, the laboratory data revealed normal serum amylase and lipase level. The skin lesions resolved.

AZA, one of the immunomodulatory drugs, plays an important role in the management of severe atopic eczema. It is a potent T-cell suppressor and thus suppresses the cell-mediated immunity. Gastrointestinal discomfort occurs in 15–28% of patients taking the drug. The incidence of AZA-induced pancreatitis is reported as varying from 1–6% of exposed individuals and AZA-related erythema nodosum was found only in rare case reports.3,4

Conflict of interest: None declared.

References