

LETTER TO THE EDITOR

The pathogenesis of acute pancreatitis in patients with SCI

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With great interest, we read the recent article by Pirolla *et al.*¹ regarding 'Association of acute pancreatitis or high level of serum pancreatic enzymes in patients with acute SCI (spinal cord injury)'. The authors discussed very clearly the association of acute pancreatitis or high levels of serum pancreatic enzymes in patients with acute SCI. They concluded that the incidence of acute pancreatitis in patients with SCI was 11.53%. Acute pancreatitis was most frequent in patients with SCI ASIA A and adynamic ileus. The period of major incidence of acute pancreatitis in SCI occurred between the 1st and 4th week after trauma. In addition to their fluent discussion, we aimed to emphasize the other possible etiologic mechanism of acute pancreatitis in patients with acute SCI.

Acute pancreatitis is an inflammatory condition of the pancreas characterized clinically by abdominal pain and elevated levels of pancreatic enzymes in the blood. The pathogenesis of acute pancreatitis is not fully understood. Gallstone is the most frequent cause of pancreatitis, in ~50% of patients, and using alcohol is responsible in a proportion of 20%. In ~20% of the cases, the cause remains unknown (idiopathic). The remaining 10% constitutes several different possible causes of acute pancreatitis. These causes include hypercalcemia, hypertriglyceridemia, medications and drugs (corticosteroids and so on). Etiology of acute pancreatitis list will undoubtedly continue to grow.² But once the diagnosis of acute pancreatitis is established, the underlying etiology should be determined. We have wondered whether they examined hypercalcemia, hypertriglyceridemia in the present patient group to detect possible etiologic risk factors. Methylprednisolone is the only treatment that has been suggested in clinical trials to improve neurologic outcomes in patients with acute, nonpenetrating SCI. However, the evidence is limited and its use is debated.³ Corticosteroids definitely associated with acute pancreatitis. Acute pancreatitis could occur in SCI patients owing to the use of high-dose corticosteroids. In this study, the authors did not give any information about using corticosteroid in these patients.

Previously, Pirolla *et al.* showed that the incidence of acute pancreatitis or the high level of serum pancreatic enzymes in patients with acute SCI was 11.53%. We believe that hypercalcemia, hypertriglyceridemia and corticosteroid medication may have a role as a risk factor in the association of acute pancreatitis or high levels of serum pancreatic enzymes in patients with acute SCI. We hope that the above mentioned items would add to the value of the well-written article of Pirolla *et al.*, regarding the effect of hypercalcemia, hypertriglyceridemia and corticosteroids medication for acute pancreatitis in patients with acute SCI. It should be kept in mind that in ~20% of the cases, the cause remains unknown (idiopathic).

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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- 2 Deng YY, Wang R, Wu H, Tang CW, Chen XZ. Etiology, clinical features and management of acute recurrent pancreatitis. *J dig dis* 2014; **15**: 570–577.
- 3 Breslin K, Agrawal D. The use of methylprednisolone in acute spinal cord injury: a review of the evidence, controversies, and recommendations. *Pediatric emerg care* 2012; **28**: 1238–1245; quiz 46–8.