

LETTER TO THE EDITOR

Association of acute pancreatitis or high level of serum pancreatic enzymes in patients with acute spinal cord injury: a prospective study

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We were very grateful and proud with the very interesting commentaries and suggestions of Professor Kargi *et al.* in their commentary letter: 'The pathogenesis of acute pancreatitis in patients with SCI'.

In our randomized controlled trial prospective study, we really measured, following Ranson's Criteria (RCs) in acute pancreatitis (AP) on admissions, the serum levels of the following:

Glucose $> 200 \text{ mg dl}^{-1}$ ($> 11 \text{ mmol l}^{-1}$)
Lactate dehydrogenase $> 350 \text{ IU l}^{-1}$
Serum glutamic oxaloacetic transaminase (aspartate aminotransferase) $> 250 \text{ IU l}^{-1}$

Following the evaluation of the patients with spinal cord injury (SCI) after 48 h of admission, we solicited the following:

Fall in hematocrit $> 10\%$
Increase in blood urea nitrogen to $> 5 \text{ mg dl}^{-1}$ ($> 1.98 \text{ mmol l}^{-1}$)
Calcium $< 8 \text{ mg dl}^{-1}$ ($< 2 \text{ mmol l}^{-1}$)

Great number of the patients with pancreatitis (78%) presented two or three of each blood test determinates in RCs including elevation of serum level of calcium.¹

Hypertriglyceridemia is a very important cause of AP; however, when levels are $> 1000 \text{ mg dl}^{-1}$ (11.3 mmol l^{-1}), and it is associated

with this disease in 1–4% of cases.^{1–3} A large proportion of patients (sample) in our study comprised younger subjects; therefore, high levels of triglycerides are very rare.³

Maybe, with the use of analyses of triglyceride blood test, as Professor Kargi *et al.* suggested, and more frequent analyses of pancreatic serum enzymes (amylases and lipases) in future studies, the rates of incidences of AP in SCI are bound to increase.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

EH Pirolla, TEP de Barros Filho, AL Godoy-Santos and F Fregni
*Research Neuromodulation Department, Spaulding Hospital
Lab/Harvard Medical School, Hospital Sirio Libanês, São Paulo, Brazil
E-mail: eduardopirolla@gmail.com*

- 1 Pirolla EH, de Barros Filho TE, Godoy-Santos AL, Fregni F. Association of acute pancreatitis or high level of serum pancreatic enzymes in patients with acute spinal cord injury: a prospective study. *Spinal cord* 2014; **52**: 817–820.
- 2 Yuan G, Al-Shali KZ, Hegele RA. Hypertriglyceridemia: its etiology, effects and treatment. *CMAJ* 2007; **176**: 1113–1120.
- 3 Berglund L, Brunzell JD, Goldberg AC *et al.* Evaluation and treatment of hypertriglyceridemia: an endocrine society clinical practice guideline. *J Clin Endocrinol Metab* 2012; **97**: 2969–2989.