Letters to the Editor

A rare cause of severe coagulopathy, leading to extradural hematoma in an alcoholic patient

Key words: *Leptospirosis. Intracranial haemorrhage.*

Dear Editor,

Changes in coagulation and thrombocytopenia are common in alcoholic patients with chronic liver disease.

However, even if an alcoholic patient presented with severe thrombocytopenia, especially when associated with other symptoms such as jaundice and fever, it is necessary to search for other possible causes that may explain these alterations.

Case report

A 46-year-old male came to our institution complaining of myalgia, fever, and jaundice, during the last week. Had a personal history of alcoholic abuse (80-100 g/day), without established chronic liver disease.

He was conscious and oriented, without flapping, but jaundiced, dehydrated, febrile (39.1°C), with tenderness hepatomegaly and petechial lesions on his legs.

Laboratory shows: leucocytes-11 900/ μ L, platelets-28 000/ μ L, creatinine-1.1 mg/dL, AST-89U/L, ALT-126U/L, LDH-812U/L, GGT-56U/L, alkaline phosphatase-68 U/L; total/ direct bilirubin-16.5/10.0 mg/dL, creatine kinase- 740 U/L and CPR-6.10 mg/dL. Albumin, prothrombin and activated partial thromboplastin time were normal.

It was requested blood and urinary cultures and *leptospira*, viral hepatitis and rickettsial serology. Abdominal ultrasonography confirmed hepatomegaly, but showed no further alterations.

Suddenly, and still in the urgency department, the patient developed a dysarthric state, keeping a Glasgow score of 14. He denied recent trauma.

A computed tomography showed an extradural parietal hematoma, with shift of midline structures (Fig.1). He was submitted to neurosurgical drainage in another hospital, and begun empiric antibiotherapy with third generation cephalosporin.

Ten days after admission, a *Lepstospira*-specific immunoglobulin M (Ig M) was confirmed positive, thus obtaining a retrospective diagnosis of leptospirosis.

The patient had a favorable course, with complete neurological and analytical recovery, after two weeks.

Discussion

Leptospirosis is a zoonotic disease with a worldwide distribution and rodents, especially rats, are the most important reservoir. However it is likely to be an underestimated problem because of the lack of awareness of the disease, its non-specific clinical presentation and the lack of rapid diagnostic tools. (1)

In this particular case, the gastroenterologist was called to the emergency room to see a patient with a history of alcoholism, which was extremely jaundiced and febrile. However there were some inconsistent findings, like absence of chronic liver disease signs, high fever, myalgia and severe thrombocytopenia, with normal prothrombin time.

Associating the clinical presentation to the fact that the patient lived in a rural area and it was late summer, *Leptospira* serology was ordered.

Yet the suspicion was not very strong and due to the fact that he needed to be transferred to another hospital, helps to overshadow the cause of those disturbances and hence the beginning of a directed causal treatment.

The hemorrhagic potential of leptospirosis was noted by

Fig. 1. Tomographic imaging of the extradural hematoma conditioning midline deviation.

Weil in 1886, but its pathophysiology is still not clearly elucidated. Although this is a potential fatal disease with serious hemorrhages, intracranial hemorrhage is an extremely rare complication and the author's didn't found more than ten cases in a "medline" search (2-6).

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