Conservative treatment of an inflammation of the round ligament of the liver

Weitsch Sophie, Chan Hon Lai, Dimitrief Maria, Pezzetta Edgardo, Martinet Olivier

Service de Chirurgie Hôpital RIVIERA-CHABAIS site Montreux

Background: Inflammation of the round ligament of the liver is a very rare condition. The etiology remains unknown. It can be complicated of an abscess, a torsion or a necrosis. We report a case of a simple inflammation of the round ligament of the liver evolving favorably with conservative treatment.

Case presentation: A 19 year old female, in good health, with no previous abdominal surgery, was admitted in the emergency department for abdominal pain. She reported pain in the right hypochondria since 3 to 4 days, increasing with deep inspiration and movement. She reported a body temperature of 37.8 degrees Celsius, episodes of shivering and sweating. At physical examination, the pain was found in the right hypochondria and in the epigastric area with local tenderness, but no rebound. Her body temperature was 37.7 °C. The laboratory findings revealed a systemic inflammation with a white blood cell count of 12.6 Giga/l and a C-reactive protein level of 44.3 mg/l, increasing in 24 hours at 86 mg/l. All the hepatic and pancreatic tests remained normal.

The abdominal ultrasound and CT scan were performed and revealed an increased diameter of the round ligament of the liver measured at 1 cm with stranding of adjacent fat, compatible with an inflammation of the round ligament of the liver. No other radiological abnormalities were seen.

A treatment of oral anti-inflammatory and analgesic drugs was started. The patient evolved favorably within 48 hours, with resolution of the pain. A gastroscopy was performed and showed no sign of gastritis. At 2 weeks of follow-up, the patient was asymptomatic, the laboratory findings showed no abnormalities and the ultrasound showed a reduction of the diameter of the round ligament to 3 mm.

Discussion and Conclusion: Inflammation of the round ligament of the liver is an extremely rare condition. Therefore it can be mistakenly diagnosed with more common presentation of right hypochondria pain such as gastritis, pancreatitis or cholecystitis. The diagnosis can be made with an abdominal ultrasound or an abdominal CT. If no complication is associated, a primarily conservative treatment can be proposed, with a clinical and biological follow-up.

References: