

Uncommon Cause of Acute Abdomen: Ectopic Pelvic Spleen

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Abstract

Case Report

The ectopic spleen is rare, characterized by splenic hyper-mobility resulting from laxity or poor development of the splenic suspensory ligaments. This allows the wandering spleen to draw, by the force of gravity, to the lower abdomen attached only to its abnormally enlarged vascular pedicle. It is usually detected in childhood. The clinical presentation is various; it may be attributed to complications: torsion, rupture, arterial infarction and compression. Diagnosis in emergency situations can be difficult because splenic volvulus is a rare cause of an acute abdomen. We present and discuss a case of an ectopic spleen in the pelvic position leading to paroxysmal abdominal pain, diagnosed by ultrasound, confirmed by computed tomography and treated by splenectomy.

Keywords: Ectopic spleen, abdominal pain, torsion, rupture.

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INTRODUCTION

The ectopic spleen is a rare entity whose incidence is poorly understood. Patients are often asymptomatic and the diagnosis can be accidental or due to complications [1], which must benefit from an early diagnosis; thus avoiding splenectomy especially among young patients [2].

PRESENTATION OF THE CASE

We report a case of ectopic spleen in the pelvic position treated at the Department of Visceral Surgery of the Hospital Ibn Tofail CHU Mohammad VI Marrakesh. Our patient is a 16-year-old female with a clinical history of chronic anemia who consults for recurring mild pain evolving for 5 months without vomiting or digestive disorder or signs of haemorrhage.

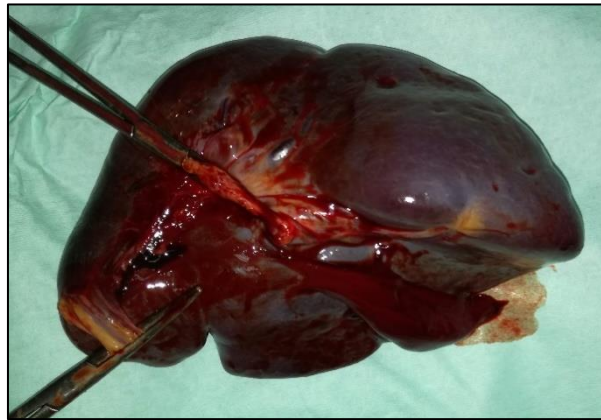
exteriorized digestive system. The clinical examination objectified a patient who was feverless, hemodynamically and respiratory stable with palpation of a painful hypogastric mass measuring 10x15 cm, of firm consistency, fixed to both planes and dull on percussion. Rectal examination was without abnormality. Abdominal ultrasound had suspected an ectopic spleen due to the vacuity of the splenic lodge and the presence of a pelvic mass measuring 14x6x11 cm vascularized on Doppler. The abdominopelvic computed tomography showed ectopic splenomegaly above the right bladder measuring 13.5x7.5x11 cm compressing the cervico-isthmic uterine region associated with low-abundance peritoneal effusion complicated by lumbar scoliosis (Picture 1).



Picture 1: Scanographic aspect of a spleen in the pelvic position

Biological assessment: Hg at 8g/dl, PLQ at 93,000, WBC at 4000, Urea at 0.22mg/l and Creatinine at 4mg/l. A midline laparotomy was performed on surgical exploration: enlarged spleen seat of a few foci

of necrosis, free, in pelvic position measuring 10*15 cm, the splenic lodge was empty occupied by part of the stomach. A splenectomy was performed (Picture 2).



Picture 2: Surgical specimen of a splenectomy for spleen in pelvic position

The patient received pneumococcal, meningococcus and hemophilus influenzae vaccination and longterm antibio-prophylaxis. The postoperative follow up was uneventful. The total duration of hospitalization was five days. Histological examination of the surgical specimen found foci of splenic ischemic necrosis.

DISCUSSION

The ectopic spleen or wandering spleen is defined as a migration of the spleen towards any region of the peritoneal cavity following a congenital or acquired anomaly of its means of fixity. It is a rare entity which is often encountered in women during the period of genital activity [3, 4].

Clinically, the ectopic spleen may remain asymptomatic and is only discovered incidentally during an abdominal examination or an imaging assessment (abdominal ultrasound or computed tomography) done for another indication [4, 5]. It can also be manifested by intermittent abdominal pain testifying to torsion attacks and spontaneous untwisting; as was the case of our patient who reported spontaneously resolving paroxysmal painful crises for five years and which never led to a consultation. The torsion of the ectopic spleen favored by its mobility, its weight and the length of its pedicle can be irreversible and manifest as a surgical acute abdomen; where abdominal pain comes to the fore; sometimes associated with nausea; vomiting and fever. Abdominal palpation looks for peritoneal signs and an abdominal or pelvic mass [6-8]. The association of this acute abdominal picture with a mobile abdominal mass should suggest the diagnosis of ectopic spleen torsion in same as ovarian mass torsion, abdominal abscess, or bowel tumor volvulus; and have an imaging report indicated to make the diagnosis. The abdominopelvic ultrasound confirms the diagnosis of torsion of the ectopic spleen

in view of the vacuity of the splenic compartment and the demonstration of an abdominal mass reminiscent of the splenic echostructure; the absence of vascularization on Doppler is an argument in favor of torsion [5, 7, 9]. Abdomino-pelvic computed tomography confirms the diagnosis of torsion of the ectopic spleen by showing an empty splenic lodge with an abdominal or abdomino-pelvic mass reminiscent of the appearance of the spleen and not taking up the contrast product after intravenous injection [3- 5, 7, 9]. Once the diagnosis is made; surgical exploration is required. It confirms the diagnosis and makes it possible to adapt the treatment. Indeed, in the absence of splenic necrosis, detorsion can be performed with splenopexy to fix the spleen in its normal anatomical position. In the case of splenic necrosis; splenectomy should be performed. These procedures can be done both conventionally and laparoscopically [1, 4, 5, 7-10].

CONCLUSION

The ectopic spleen could be identifiable on physical examination since the childhood. Often, in the adulthood the diagnosis due to complications. The surgical treatment must be performed before the installation of the splenic infarction (Splenopexy if no necrosis, especially in young patients). Laparoscopy as a minimally invasive approach should be the gold-standard.

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