TORSION OF THE WANDERING SPLEEN

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Key-word: Spleen

Background: A 27-year-old man was admitted to our hospital with a 2-day history of abdominal pain and vomiting. The pain was non-continuous, poorly localized, and non-colicky and non-radiating in nature. Over the prior 2 months, he reported one other similar episode that had resolved spontaneously. Physical examination revealed left upper abdominal quadrant tenderness and a palpable suprapubic mass. His vital signs were stable and laboratory findings were unremarkable. Plain film of the abdomen showed gas filled bowel loops in the splenic fossa.

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Work-up

Contrast-enhanced CT scan of the abdomen (Fig. 1) shows an reformatted image in the coronal plane (A) absence of the spleen in the left upper quadrant. Transverse section at umbilical level (B) demonstrates enlarged and diffusely hypodense spleen at this level. Transverse section at a more cranial level (C) shows prominent splenic vessels and the surrounding fat with a whorled appearance ("whirl sign").

Radiological diagnosis

The clinical and radiological findings were consistent with splenic torsion. Surgery confirmed the diagnosis of torsion of the wandering spleen. Splenectomy was performed, and spleen was found to be infarcted.

Discussion

Laxity of the peritoneal attachments of the spleen results in splenic hypermobility, known as wandering spleen. Its incidence is less than 2 per 1000 splenectomies. The symptoms are variable and the most common is abdominal pain. Acute wandering spleen torsion can be confused with appendicitis or ovarian torsion. Contrast-enhanced CT is useful for the detection of wandering spleen torsion. It is the whorled appearance of the splenic vessels and surrounding fat is called "whirl sign" which considered pathognomonic of the condition. Splenic infarction is seen as non-enhancing low-attenuation areas on contrast-enhanced CT, thereby providing crucial information concerning the viability of the spleen. Another specific sign of splenic infarction on CT is the "rim sign," in which the splenic capsule is hyperdense compared with the parenchyma. Treatment of wandering spleen is surgically because conservative treatment is associated with increased complications. Surgical treatment consists of either splenectomy or splenopexy.

Bibliography