

Acute torsion of a wandering spleen: a paediatric emergency

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DESCRIPTION

A 5-year-old boy presented to the emergency department with intense dull aching pain in the left lower abdomen. On physical examination, his vitals were stable. A well-defined, tender, firm, 10×6cm sized mass was palpable in the left lower abdomen occupying the left hypochondrium, left lumbar and umbilical regions. Urgent ultrasound revealed the absence of spleen in the normal position with a hypoechoic encapsulated mass in the left lower abdomen while Doppler study showed the absence of internal vascularity in it. Contrast-enhanced CT (CECT) of the abdomen (figure 1A,B) confirmed the presence of an enlarged, minimally enhancing and inferiorly displaced spleen with characteristic 'whirled appearance' of the splenic hilum. The diagnosis of splenic torsion was confirmed and an exploratory laparotomy was performed. Intraoperatively, the spleen was torsed 720 degrees on its pedicle with an engorged and thrombosed splenic vein (figure 2A,B). The ligamentous attachments (gastro-splenic, splenocolic, splenophrenic and splenorenal) of spleen were absent leading to an inferiorly displaced wandering spleen. After an unsuccessful attempt to preserve the spleen with counter-clockwise detorsion of the pedicle, splenectomy was performed. The child had an uneventful recovery and was discharged on the fourth postoperative day.

Wandering spleen is a rare condition accounting for less than 0.25% of all splenectomies. It can either occur due to congenital absence of suspensory ligaments of spleen or due to an acquired laxity of these ligaments.¹ Acute abdominal pain due to torsion followed by an abdominal mass are the most common clinical presentations in children.² The presence of a comma-shaped spleen at an abnormal location on ultrasound along with absence of internal vascularity on Doppler in a symptomatic child are characteristic features for torsion of a

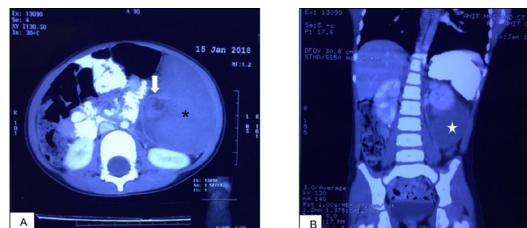


Figure 1 Contrast-enhanced CT scan of the abdomen showing a whirled appearance of the twisted splenic pedicle, that is, whirl sign (arrow in A) and a non-enhancing infarcted spleen (asterisk in A). These features with an inferiorly displaced ectopic spleen (star in B) in the left lumbar region are characteristic of torsion of a wandering spleen.

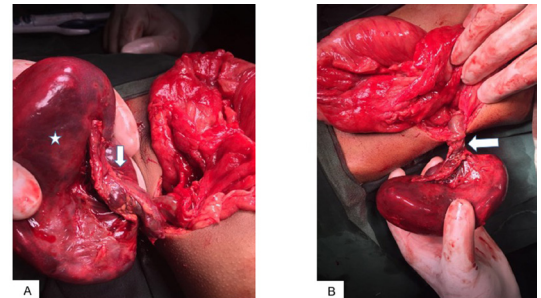


Figure 2 Intraoperative appearance of a twisted splenic pedicle (solid arrows in A and B) and an infarcted spleen (asterisk in A).

wandering spleen. At times, these features can be obscured by bowel gas. Thus, a CECT scan of the abdomen is an excellent alternative in these conditions and can provide a better delineation of the whirled (twisted) splenic pedicle.³ The decision of splenopexy versus splenectomy depends on the success of detorsion and viability of spleen.

Learning points

- ▶ Wandering spleen is a rare clinical entity with the presence of an abnormally positioned hypermobile spleen.
- ▶ Children with wandering spleen can have a variable clinical presentation from an incidental diagnosis at one end of the spectrum to an acute abdomen due to torsion at the other end.
- ▶ When torsed, splenectomy should be performed in conditions of massive splenic infarction and/or splenic vein thrombosis.

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