

Torsion Of A Wandering Spleen: A Rare Cause Of Acute Abdomen

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Citation

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Abstract

Wandering spleen is a rare clinical entity resulting from congenital maldevelopment or acquired laxity of spleen's suspensory ligaments due to visceroptosis. The patient may present with acute abdomen due to splenic infarction resulting from torsion of splenic pedicle. We report a case that was diagnosed by was abdominal ultrasound and salvaged by splenectomy.

CASE REPORT

12-year-old male patient presented with one day history of pain epigastrium that was severe, constant in nature and was associated with vomiting. Patient gave prior history of similar complaints for last six months. This time pain did not resolve but rather increased in intensity. He was afebrile and had tachycardia. Abdominal examination revealed marked tenderness with a palpable large central abdominal mass. Laboratory investigations revealed a Hemoglobin of 13.0 gm%, WBC – 5200/mm³ and platelet count – 90,000/mm³. Ultrasound of the abdomen revealed large echogenic mass in the right mid-abdomen and spleen could not be detected at its normal position.

Patient was explored through midline incision in emergency. On exploration there was enlarged spleen with infarction in place of lump (Fig-1).

There was no evidence of any splenocolic, splenorenal or splenophrenic ligament. Spleen was freely floating in the peritoneal cavity with about 20 cm long pedical. The pedical was twisted with three full rotations in a clockwise fashion (fig-2). Splenectomy was performed and patient recovered smoothly. Grossly, spleen weighed 1500 gm and was 19x12x9 cms in size. Histological examination revealed extensive hemorrhagic areas with few areas of infarction. No signs of pre-existing disease were found.

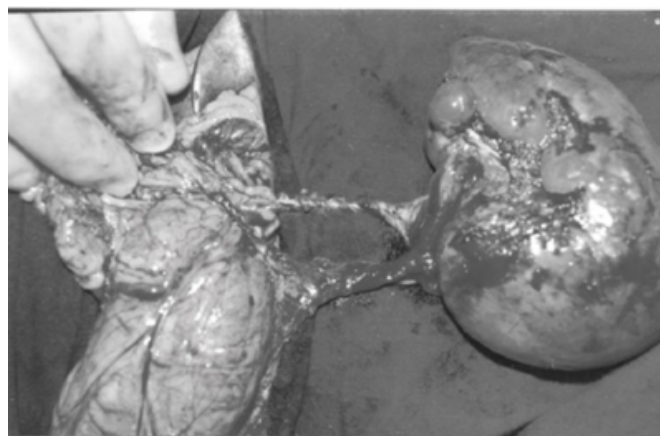
Figure 1

Figure 1: Operative photograph showing enlarged spleen with areas of congestion and infarction.



Figure 2

Figure 2: Photograph showing long splenic pedical with multiple twists.



DISCUSSION

Wandering spleen is an extremely rare anatomic variant, with serious implications. It accounts for only 2 in 1000 splenectomies¹. Anatomically, this condition is characterized by incomplete fixation of the lienorenal and the gastrosplenic ligaments. Thus the spleen is free to move in the abdomen². Due to excessive mobility, there is constant risk of torsion leading to splenic congestion and infarction³. Abnormal location and increased size predispose to splenic trauma.

Patients usually presents with asymptomatic abdominal mass, as acute abdomen or as a mass associated with pain abdomen⁴. Other rare presenting features reported in the literature are intestinal obstruction due to long pedical, thrombocytopenia due to hypersplenism, celiac axis occlusion due to median arcuate ligament compression, left sided hydronephrosis and gastric volvulus^{3,5,7,8}.

Diagnosis requires high degree of suspicion, both during initial assessment and on investigation. Absence of spleen in its normal position on ultrasound or CT scan is the guiding factor in most of the cases. Splenectomy is the most common procedure performed in such cases. Splenopaxy is an alternative option where infarction has not set in. Recently, laparoscopic approach has been described to perform either splenopaxy or splenectomy³.

In conclusion, torsion of wandering spleen is a rare but important differential diagnosis in patients presenting with

acute abdomen. Awareness of this clinical entity helps in timely diagnosis, confirmed with imaging modalities and managed by early operative intervention by open or laparoscopic technique.

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