

CASE REPORT**SPLenic TORTION IN A WANDERING SPLEEN: A CASE REPORT
FROM AYDER REFERRAL HOSPITAL**Reiye Esayas, MD¹**ABSTRACT**

A 46 years old female patient presented with worsening of abdominal pain of 12 days duration & abdominal swelling of 15 years. On examination, she had an elliptical, mildly tender mass on the periumbilical area extending to the right flank & the suprapubic area. It is mobile & firm in consistency. The intra op finding was huge spleen weighing 2 kgs, rotated 360° clockwise, situated over the right side of the abdomen. This case report showed that a wandering spleen can present acutely with torsion mimicking acute abdomen.

Keywords: wandering spleen; splenic torsion

INTRODUCTION

Wandering spleen is a rare clinical entity which is characterized by a congenital deficiency or acquired laxity of splenic suspensor ligaments. Although its true incidence is unknown, it comprises <0.25% of all indications for splenectomy. (1) Clinical diagnosis is difficult due to lack of symptoms, unless splenic torsion has occurred which may lead to splenic infarction and clinical symptoms of acute abdomen develops. (2). The diagnosis can be confirmed by imaging techniques.

There was no history of trauma or surgery. She described a previous episode of similar pain 5 years earlier.

On physical examination, a 25 X 20 cm elliptical, mildly tender mass on the periumbilical area, more on the right side. It is mobile & firm in consistency (Fig.1). Laboratory investigations showed a hematocrite of 24.6, platelets of $108 \times 10^3/\text{mm}^3$ and white cell count of $11.8 \times 10^3/\text{mm}^3$. Ultrasound of the abdomen showed absence of spleen in its usual place, an enlarged spleen on the right side of the abdomen.

CASE REPORT

A 46-year-old woman presented with worsening of abdominal pain of 12-day history and intermittent history of vomiting. The pain was dull aching and aggravated after meal. She noticed abdominal swelling since 10 years back which was gradually increasing in size. She reported intermittent constipation but no fever. She claimed to have repeated malarial attack in the past 20 years as she lives in a malaria endemic area.

At emergency laparotomy, a freely floating infarcted spleen with no other attachments other than the 360° clockwise torted vascular pedicle was found in the lower abdomen (Fig.2). The tail of pancreas was found attached to the pedicle just proximal to the point of torsion and was dissected off the pedicle undamaged. The specimen weighed 2kg, measuring 24×18× 10 cm. Postoperative recovery was uneventful. The patient was discharged 5 days post-surgery.

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Fig.1. A central abdominal mass more on the right side



Fig.2. Intraoperative view showing a floating infarcted spleen with a clockwise torsed vascular pedicle

DISCUSSION

The spleen is held in its place by the chief ligaments gastrosplenic and splenorenal which form the splenic pedicle and other minor ligaments (the splenophrenic, splenocolic, pancreatosplenic, pancreatocolic, and phrenicocolic ligaments, and the presplenic fold).⁽³⁾

Wandering spleen, also known as ectopic spleen, splenoptosis, free-floating spleen, pelvic spleen or aberrant spleen is nothing but a spleen in a non-anatomical position and has a long peddicle. It is characterized by congenital deficiency or acquired laxity of the suspensor ligaments. Congenitally, it can be absent due to failure of fusion of the dorsal mesogastrium with the posterior abdominal wall during the second month of embryogenesis.⁽⁴⁾ The acquired form is believed to be caused by a laxity of these ligaments, which might be attributable to hormonal changes, splenomegaly, trauma, or multiparity. That's why it is common in women of reproductive age group but children are also affected in one third of the cases. ^(5,6)

Torsion usually occurs clockwise and is precipitated by body and adjacent organ movement and subsequent change in intra-abdominal pressure. ⁽⁷⁾ With the size of the splenomegaly and the length of the pedicle, the probability of torsion increases. The natural course of torsion is, impaired venous return, congestion, venous thrombosis, compromised arterial supply, further congestion, infarction, fibrosis and necrosis of spleen. Complications of acute splenic torsion are gangrene, abscess formation, pancreatic tail necrosis and bleeding gastric varicose vein.^(2,6)

Clinical presentation ranges from asymptomatic intra-abdominal mass to acute abdomen due to torsion. There could be intermittent abdominal pain due to torsion and detorsion. More frequently, patients are admitted due to a non specific chronic abdominal discomfort along with a palpable abdominal mass resulting from splenic congestion due to splenic torsion.

Generally, lab investigations are non-specific but rarely thrombocytopenia may be there. ⁽⁸⁾ Ultrasonography and abdominal CT scan are the most useful diagnostic methods and show absence of spleen in its normal position, and a comma-shaped structure located somewhere else in the abdomen or pelvis.⁽⁹⁾

The treatment of wandering spleen is surgical. The surgery could be splenectomy or splenopexy. Splenectomy is done for symptomatic cases with splenic torsion, infarction, thrombosis of the splenic vessels and suspicion of malignancy. Splenopexy is highly recommended in pediatrics age group to minimize post-splenectomy septicemia and it can be done open or laparoscopically and with or without mesh. (10,11)

Prompt diagnosis of wandering spleen is difficult for it is rare and the clinical presentation is not specific. Yet, its complication, torsion, is life threatening. So, it needs to be considered as one of the causes of acute abdomen in a female patient presenting with acute abdominal pain with no underlying predisposing factors such as trauma, hematologic or hepatic causes.

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