

*Case Report*

Wandering Spleen - An Uncommon Entity

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ABSTRACT

Wandering spleen is a very rare defect characterized by the absence or weakness of one or more of the ligaments that hold the spleen in its normal position in the upper left abdomen. Patient symptomatology is variable and ranges from mere feeling of an abdominal lump to sudden abdominal pain due to infarction. Patients may have subacute to chronic abdominal or gastrointestinal complaints. Because of nonspecific symptoms, clinical diagnosis can be difficult; hence, imaging plays an important role. A major complication is splenic torsion, which is the cause of acute abdomen. Preoperative diagnosis was made on the basis of ultrasonography and computed tomography, which was later confirmed on surgery, and treated successfully.

Key words: RIF (right iliac fossa) Splenopexy, splenectomy, wandering spleen.

INTRODUCTION

Congenital wandering spleen is a very rare randomly distributed birth defect characterized by the absence or weakness of one or more of the ligaments that hold the spleen in its normal position in the upper left abdomen.^[1] Instead of ligaments, the spleen is attached by a stalk-like tissue supplied with blood vessels (vascular pedicle). If the pedicle is twisted in the course of the movement of the spleen, the blood supply may be interrupted or blocked (ischaemia) to the point of severe damage to the blood vessels (infarction). Because there is little or nothing to hold it in place, the spleen “wanders” in the lower abdomen or pelvis where it may be mistaken for an unidentified abdominal mass.

“Acquired” wandering spleen may occur during adulthood due to injuries or other underlying conditions that may weaken the ligaments that hold the spleen in its normal position (connective tissue disease or multiparity).^[2]

CASE REPORT

A 15 year-old female presented to Emergency Unit with complaints of abdominal pain, two-week history of constipation, and a tumor in the right lower abdomen. At admission, the patient was afebrile, pale and fully conscious. Her Abdomen was soft on palpation with a 10 X 8 cm mass palpable in the right hypogastric region.

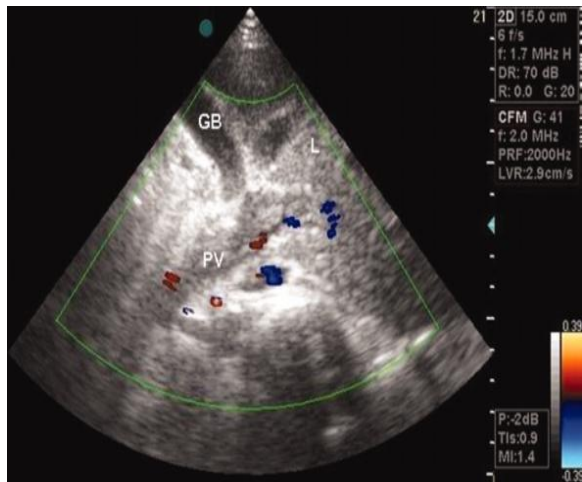


Fig.1 Ultrasonography abdomen.

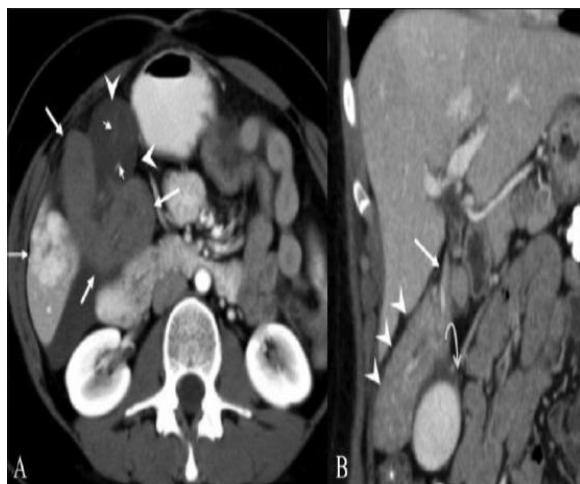


Fig2. CT Abdomen.



Fig.3 Operative table finding.

Ultrasound of the abdomen: Absence of the spleen in its normal position in the left hypochondrium, and presence of tumor mass

in the right fossa inguinalis. Other organs of the abdomen were normal.

CT Abdomen findings- Absence of the spleen in its normal position in the left hypochondrium, and presence of tumor mass of size 9.8X7.5 cms. in the right fossa inguinalis. Other organs of the abdomen were normal

Patient was shifted to Operation Theater for laparotomy. Intraoperative findings revealed a mass in right fossa inguinalis, with lax ligament attached without any gangreneous changes in mass or surrounding. Left hypochondrium was empty and absence of spleen at its normal position confirmed. The mass encountered in RIF was confirmed as spleen and splenopexy was performed. Post operative recovery was uneventful.

DISCUSSION

A wandering spleen is a rare but well-known entity. The incidence is < 0.2%. It is more common in females than males in an adult population.^[2] Acute, chronic or intermittent torsion of the spleen is the major complication of an abnormally mobile spleen, the "wandering spleen." The increased mobility of the spleen results from absence or laxity of the supporting ligaments (gastrosplenic and splenorenal ligaments) that normally anchor the spleen in its normal position.^[3] Wandering spleen is an uncommon clinical entity, which rarely affects children and adolescents.

The clinical presentation of a wandering spleen can be variable. Affected patients may be asymptomatic and this condition may be discovered incidentally as an abdominal mass on physical examination or on imaging for other unrelated reasons. Patients may have mild intermittent abdominal pain due to splenic congestion with intermittent torsion and spontaneous detorsion, or may present with an acute abdomen due to torsion of the splenic

pedicle with subsequent infarction. With acute torsion, the condition can be confused with appendicitis or ovarian torsion. Splenic torsion is usually clockwise. Complications of splenic torsion include: gangrene, abscess formation, local peritonitis, intestinal obstruction and necrosis of the pancreatic tail, which can lead to recurrent acute pancreatitis.^[3] Other clinical symptoms include nausea, vomiting, fever, leukocytosis, peritoneal signs, and a palpable mass in the abdomen or pelvis. Symptoms of wandering spleen are those typically associated with an abnormal size of the spleen (splenomegaly) or the unusual position of the spleen in the abdomen.

Patients may be asymptomatic or may present with acute abdominal pain. The common clinical presentation is abdominal mass with pain.^[4] It may occur in people of all ages with a predilection for male under 10 years of age and for female patients in older age groups, being most common in multiparous women.^[5]

For the definitive diagnosis of a wandering spleen, various imaging techniques, including plain radiography, barium enema, scintigraphy, gray-scale sonography, Doppler ultrasonography, CT and angiography should be used.^[6]

Historically, splenectomy has been the treatment for symptomatic wandering spleen. With increasing appreciation for the importance of the spleen in reticuloendothelial function, there has been renewed interest in splenopexy.^[6] However, in cases of splenic torsion with infarction, splenectomy is required. Attention to vaccination for encapsulated organisms should be performed, usually 1 to 2 weeks after splenectomy.^[6] Splenopexy is the treatment of choice for a noninfarcted wandering spleen. Splenic preservation in cases of wandering spleen without rupture or infarction avoids the risk of overwhelming postsplenectomy sepsis, Splenectomy should

be done only when there is no evidence of splenic blood flow after detorsion of the spleen.

CONCLUSION

The possible diagnosis of wandering spleen should be kept in mind when CT shows the spleen to be absent from its usual position and a mass is found elsewhere in the abdomen or pelvis. Abdominal ultra sonography (with or without Doppler) and CT are useful investigative tools. Early intervention is necessary to reduce the risk of splenic infarction and other complications. An awareness of the condition together with the use of appropriate medical imaging can lead to the correct diagnosis.

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