

## A case of wandering spleen

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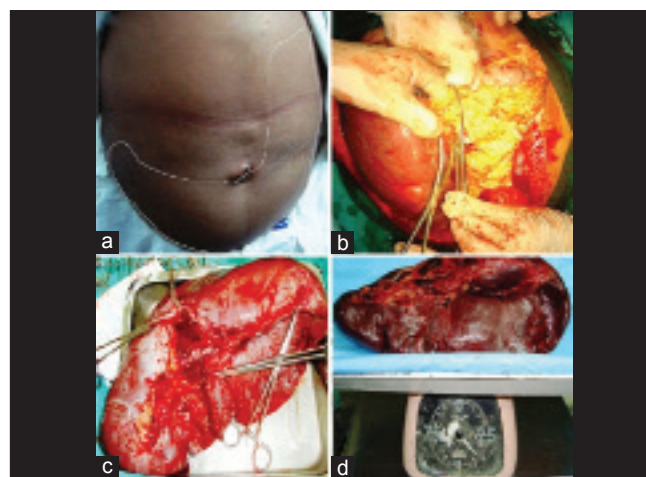
### ABSTRACT

Wandering spleen is a rare entity characterized by huge spleen with laxity of the splenic ligaments, absence of peritoneal attachments and presence of long pedicles. We herein present a case of a 42-year-old female with wandering spleen that presented to our clinic with intermittent abdominal pain associated with an abdominal lump.

**Key words:** Acute abdomen, splenectomy, splenopexy, splenoptosis, systopic spleen

A 42-year-old woman presented to our clinic with 4 months history of an abdominal lump and vague discomfort, intermittent abdominal pain with fullness of abdomen. She reported the pain to have increased in frequency since last 2 weeks. She had a normal body built, was afebrile and with stable vitals. Abdominal examination elicited diffuse tenderness and an intra-abdominal lump spanning over the epigastrium, umbilical, hypogastrium, left hypochondrium, left lumbar, left iliac, and the right iliac region [Figure 1a]. Routine hemogram, liver and kidney functions, serum electrolytes, urine microscopy, and chest roentgenogram were all normal. Ultrasound of the abdomen demonstrated massive splenic enlargement extending from the epigastrium to hypogastrium on the left to the iliac region on the right. Patient was hospitalized, and initial conservative treatment was initiated. Following 4 h of admission, her abdominal pain became severe and made her restless. A decision on performing an emergency exploratory laparotomy was undertaken in view of her condition following high-risk consent. Intra-operatively, a massive, mobile spleen measuring  $25 \times 14 \times 6.5$  cm and with long pedicle and long ligaments was localized extending from the left upper abdomen to the left pelvic region [Figure 1b]. A splenectomy was performed [Figure 1c], and the massive organ weighed 3750 g [Figure 1d]. Histopathological study of the specimen revealed normal splenic tissue. Postoperatively, patient received broad spectrum antibiotics and supportive care. To prevent overwhelming postsplenectomy sepsis, patient was vaccinated with polyvalent pneumococcal vaccine, quadrivalent meningococcal/diphtheria hemophilus b conjugate [1]. With the postoperative period being uneventful, patient was discharged on the 11<sup>th</sup> day following surgery. Patient was followed-up once in every 3 months for a period of 1 year and is doing well with no clinical complications.

Wandering spleen, also known as ectopic, displaced, devious or aberrant spleen, is a rare entity defined as a huge, single spleen in an abdominal position rather than its anatomical site owing to laxity of its pedicles and absence of ligamentous attachments [2,3]. Even though exact etiology is unknown, abdominal laxity, multiparity, irregular menses, hormonal effects of pregnancy, embryologic developmental errors are postulated to be possible causes for laxity of splenic ligaments [4]. While clinical presentation may pose dilemma to the surgeons as it could be mistaken with other abdominal lumps, ultrasonography, tomographic scans and scintigraphy are the most accurate diagnostic tests for wandering spleen [5]. In our case, a provisional diagnosis of splenomegaly was made prior to surgery, and the case was confirmed intra-operatively as a wandering spleen due to the presence of long, vascular splenic pedicle without any peritoneal attachments. It is critical to understand the complications related to wandering



**Figure 1** (a) Intra-abdominal lump spanning over the epigastrium, umbilical, hypogastrium, left hypochondrium, left lumbar, left iliac, and the right iliac region. (b) Intra-operatively, a massive, mobile spleen measuring  $25 \times 14 \times 6.5$  cm and with long pedicle and long ligaments was localized extending from the left upper abdomen to the left pelvic region. (c) Splenectomy performed. (d) Massive spleen weighing 3750 g

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## CLINICAL IMAGE

spleen specially those arising due to its length of the pedicle. The abnormally fixed spleen can twist on its vascular pedicle predisposing to ischemia that may progress to infarction if not promptly treated surgically [6]. Postoperative management including antibiotics, usually cephalosporins/penicillins and vaccinations to prevent life-threatening infections along with regular follow-ups are utmost essential for these patients.

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## Authors' Contributions

SPS was involved in patient care and operated upon the patient. SS, SPS, and KS participated in the sequence alignment, drafting the manuscript and literature review. SS, KS and PK made useful contributions in the revision of the manuscript. All authors read and approved the final manuscript.

## Consent

SPS certifies that a written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the editor-in-chief of this journal.

## Competing Interests

The author(s) are on the editorial team of the journal.

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