

# Wandering Spleen with Huge Splenomegaly: a Diagnostic Challenge

K Shahi, B Geeta, P Rajput

## Citation

K Shahi, B Geeta, P Rajput. *Wandering Spleen with Huge Splenomegaly: a Diagnostic Challenge*. The Internet Journal of Surgery. 2008 Volume 19 Number 2.

## Abstract

Wandering spleen is a rare clinical entity characterized by mal-development of suspensory ligaments and elongation of the splenic pedicle which result in a mobile spleen. It is seen in women of child-bearing age and in children below 10 years of age. We report a case of a 30-year-old female with a pelvic wandering spleen who presented with a lump in the lower abdomen with dull aching pain and frequency of micturition. Diagnosis of pelvic wandering spleen was made on CT scan and exploratory laparotomy revealed an enlarged spleen with a long pedicle and absence of lienorenal and gastrosplenic ligaments. Splenectomy was performed successfully.

## INTRODUCTION

Wandering spleen is a rare clinical entity characterized by absence of normal ligamentous attachments of the spleen and laxity of the splenic pedicle. This condition is also known as floating spleen, drifting spleen, systopic spleen and splenoptosis. An uncomplicated mobile spleen presents as a freely mobile abdominal lump which poses a diagnostic challenge due to lack of awareness and paucity of symptoms. We report a case of pelvic wandering spleen with huge splenomegaly.

## CASE REPORT

A 30-year-old lady presented with a six-month history of a lump and vague discomfort in the abdomen. There was no gastrointestinal symptom but she had increased frequency of micturition. Her physical examination was unremarkable. Abdominal examination revealed an intra-abdominal lump on the left side occupying pelvic; umbilical and lumbar region. It was firm and non-tender with smooth surface and freely mobile in all directions. Hemogram, urine, stool, blood biochemistry, plain x-rays, chest and abdomen were normal.

General blood picture reported no abnormal cells.

Ultrasonography reported the swelling as a homogenous mass arising from the pelvis and compressing the urinary bladder. CT scan of the abdomen reported an enlarged spleen (22cm) in ectopic location extending from the level of the renal hilum anterior to the left kidney to the suprapubic

region, compressing the urinary bladder and displacing surrounding bowel (Figure 1).

## Figure 1

Figure 1: CT scan of the abdomen showing a huge spleen in the pelvis



Exploratory laparotomy was performed under general anaesthesia. A huge enlarged spleen with a long pedicle was seen (Figure 2).

**Figure 2**

Figure 2: A huge enlarged spleen with long pedicle



Gastrosplenic and lienorenal ligaments were absent. Splenectomy was performed easily with ligation of the splenic pedicle. The post-operative period was uneventful and the patient was discharged on the 10<sup>th</sup> post-operative day. Histopathology report was normal.

### DISCUSSION

Wandering spleen is a condition characterized by absence of the normal ligamentous attachments of the spleen. Because of lack of fixation and an unduly long pedicle the spleen “wanders” in the abdominal cavity and pelvis, where it can be mistaken for an unidentified abdominal mass. Until now nearly 500 cases of wandering spleen have been reported<sup>1</sup>. It usually occurs in women of 20-40 years and children below 10 years of age. The reported incidence based on splenectomies for all ages is 0.16%<sup>23</sup>. The bimodal age incidence favors congenital and acquired etiological factors<sup>4</sup>. Malformations or absence of splenic attachments like lienorenal and/or gastrosplenic ligaments with long splenic pedicle have been described, as in our case<sup>5</sup>.

Clinical diagnosis of Wandering Spleen is difficult, it may be confused with enlarged kidneys or tumors of renal, ovarian, uterine or colonic origin. It may present as an asymptomatic incidental finding on physical or radiological examination or with acute abdomen as a result of torsion and infarction<sup>67</sup>.

However, the most common presentation is an abdominal mass with non-specific symptoms like ischuria, constipation

and pelvic discomfort. Hypersplenism, thrombocytopenia and lymphoma have also been described with wandering spleen<sup>8</sup>.

Diagnosis can be confirmed by various imaging modalities like ultrasonography, CT scan and scintigraphy. In our case, diagnosis was made on CT scanning which has an additional advantage as it demonstrates the organ’s circulation and viability. Duplex ultrasonography can provide similar information but it is operator-dependent<sup>9</sup>.

Treatment of choice for wandering spleen is operative splenopexy, open or laparoscopic, for uncomplicated spleen due to complications like torsion and infarction.<sup>101112</sup>

Splenectomy is done when there is compromised blood flow and in cases of splenomegaly which preclude splenopexy as in our case<sup>5</sup>.

### CORRESPONDENCE TO

Dr. Shahi K. S., MS, FICS, FAIS Kamal Kunj, Rampur Road, North Manpur, Haldwani Nainital-Pin. 263139, Mob.: 09412906925 Ph.: 05946 – 234442, E-mail: kedar\_shahi@rediffmail.com

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**Author Information**

**KS. Shahi, MS, FICS, FAIS**

Asst. Professor, Dept. of Surgery, U.F.H.T. Medical College

**Bhandari Geeta, MD**

Asst. Professor, Dept. of Anaesthesiology, U.F.H.T. Medical College

**P. Rajput, MS**

Dept. of Surgery, U.F.H.T. Medical College