

ECTOPIC SPLEEN- A CASE REPORT

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ABSTRACT**BACKGROUND**

Ectopic spleen is a rare clinical entity. It maybe asymptomatic or presents as abdominal discomfort. We report a case of ectopic spleen in a 25-year-old male patient presented as lower abdominal pain. On ultrasonography, spleen was found in right iliac fossa region.

KEYWORDS

Ectopic Spleen, Wandering Spleen, Right Iliac Fossa, Torsion, Splenomegaly.

HOW TO CITE THIS ARTICLE: Ramadugu S, Chigicherla LR, Kuchukulla VRR, et al. Ectopic spleen- A case report. J. Evid. Based Med. Healthc. 2017; 4(25), 1495-1497. DOI: 10.18410/jebmh/2017/291

BACKGROUND

Spleen is an intraperitoneal organ located in the left upper quadrant with a smooth serosal surface. Its normal position is provided by two fatty ligaments- The gastrosplenic ligament, which connects the greater curvature of the stomach to the ventral aspect of the spleen and the splenorenal ligament between the left kidney and the spleen attaching the spleen to the posterior abdominal wall.

The splenic hilum is directed anteromedially and includes splenic artery and six or more branches of the splenic vein.

Splenic size changes according to the age and weight. Configuration of the spleen is also variable according to the indentations of the organs, including stomach, colon, pancreas and kidney, which are in close relation to the spleen.

Wandering or ectopic spleen is a rare entity in which the spleen is located outside of its normal location. Its reported incidence in several large series of splenectomies is less than 0.5% and mainly detected in children and women between 20 and 40 years of age.

Ligamentous laxity may result in splenic hypermobility causing migration of spleen from its anatomical site to another abdominal or pelvic location, a condition known as "ectopic spleen," also called as wandering spleen, aberrant spleen and splenic ptosis.

It maybe congenital or acquired and most commonly occurs in females.¹

The most convincing theory of ectopic spleen is congenital origin related to factors such as abnormal fusion of posterior mesogastrium. Splenic ligaments may not fuse or develop with adequate support for the spleen.²

The spleen can be found anywhere in pelvis or abdomen, most commonly occurs in left iliac fossa.³

Presentation maybe abdominal pain/discomfort.

Complication are infection, trauma and torsion.⁴

Ultrasonography is the investigation of choice. Other modalities are CT scan, MRI, angiography and Doppler study.

Laboratory findings are nonspecific and nondiagnostic. These include leucocytosis, thrombocytopenia and anaemia.

Case Report

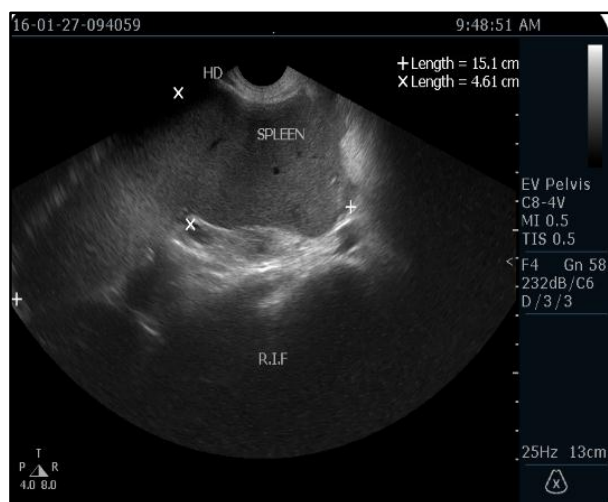
- We present a case of 25-year-old young male presented to surgical outpatient clinic with complaints of lower abdominal pain since 1 year. Pain is dragging type predominantly in right iliac fossa region.
- Physical examination revealed a firm, smooth mass in right iliac fossa region with mild tenderness on palpation.

Radiological Findings

- Transabdominal sonography (Philips HD- 7, 3 to 5 MHZ curvilinear transducer) showed absence of spleen in splenic fossa.
- A homogeneous well-defined, hypoechoic mass lesion noted in right iliac fossa measuring 13.4 x 4.7 cm on colour Doppler vascularity was normal. Splenic artery is measuring 6 mm in its short axis originating from right side of aorta (image 1).

Financial or Other, Competing Interest: None.
Submission 02-03-2017, Peer Review 09-03-2017,
Acceptance 22-03-2017, Published 27-03-2017.
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DOI: 10.18410/jebmh/2017/291



**Image 1**

All other solid organs were in their normal position with no other congenital abnormality except for the spleen.

On plain and contrast-enhanced computed tomography, there was a well-defined hypodense mass noted in right iliac fossa. There was enhancement with vessels visualised clearly (image 2, 3).

**Image 2****Image 3****Image 4. Intraoperative****Image 5. Postoperative**

DISCUSSION

Van Horn, a Dutch physician, described this condition in 1667 after performing an autopsy, since then approximately, 500 cases of ectopic spleen have been reported worldwide.

Incidence is around 0.2% between 20 and 40 years of age and most commonly in women.

The detection and characterisation of accessory spleens are important in three clinical scenarios. First, an accessory spleen may mimic lymphadenopathy and tumours and also other abdominal organs such as the pancreas, the adrenal gland and the kidney.

Second, accessory spleens occasionally may become symptomatic because of torsion, spontaneous rupture, haemorrhage, and cyst formation. Third, a surgeon's awareness of their presence maybe important when the intention is to remove all functional splenic tissue (e.g., haematologic disorders).

Other congenital and acquired splenic anomalies, including splenic clefts, lobulations, polysplenia and splenosis should be differentiated from accessory spleens.

Ectopic spleen in male patient with right iliac fossa presentation is an extremely rare condition with a very few cases reported worldwide.

Ectopic spleen also seen in some disorders where there is foregut rotation and fusion of dorsal mesogastrium, such as prune belly syndrome, postpartum laxity, splenomegaly, previous abdominal trauma and poor abdominal tone.

Ectopic spleen in our report is of an adult man and might be due to developmental anomaly.

Clinically, patients may present with an asymptomatic mass and with nonspecific gastrointestinal complaints and could also present with acute abdomen.

Symptoms may persist for long periods, but complications are related to torsion or compression of abdominal organs.

Variable imaging modalities are available to diagnose this condition. USG findings of a solid mass with absence of spleen from its normal location a peripheral indentation on the mass, representing hilar vasculature, helps in identifying as spleen. Doppler USG demonstrates flow in the vessels.⁵

CT is helpful to show changes in splenic location or apparent changes in shape because of mobility or torsion, torsion may produce a whorl appearance of splenic pedicle.²

When the diagnosis of ectopic spleen is made, splenectomy is done to avoid any complications, but if there is an infarction splenectomy is performed.

CONCLUSION

We have reported a case of ectopic spleen in right iliac fossa in a male patient, which is a rare entity in ectopic spleen condition.

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