



Accessory Spleen in Pelvic Area

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Abstract

19 Years old female presented to rapid access Gynaecology clinic with complaints of right sided pelvic pain. She had no significant medical or surgical history.

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Imaging findings

USG pelvis (TA and TV)

Endometrium and both ovaries appears normal. Deep within Pouch of Douglas/left of midline there is well circumscribed homogenous spherical mass measuring 21x23x29mm which demonstrate marked vascularity. It is separate to both ovaries and bowel was seen freely mobile adjacent to this.

MRI scan

There is a 3 cm in size well defined homogeneous intermediate T1 and T2 signal intensity solid mass in the left adnexal region abutting the uterine serosal surface but seen separate from left ovary and rectum. The lesion exhibits true restriction of the diffusion. This was suggested to represent a broad ligament leiomyoma with higher cellularity but other pathology cannot be excluded. There was no pelvic lymphadenopathy and ascites.

Pathology

Macroscopic: Fragments of brown tissue measuring from 15 mm to 35 mm in aggregate, weighing 604 gm. no evidence of Hematological Malignancy There is also peritoneal fat. There are no Lymph Nodes.

Microscopic description

Fragments of Spleen with preserved Architecture consistent with accessory spleen. There is no evidence of Hematological Malignancy.

Tumour markers

All tumour Markers CEA, CA125, HCG and Alpha fetoprotein have been reported normal.

Diagnosis: Accessory spleen in pelvic area

Accessory Spleen (AS) is also called supernumerary spleen



or spleneculus is benign asymptomatic/ symptomatic, a rare entity and usually near the splenic hilum and in the Adjacent to tail of Pancreas. Pelvis is an Atypical and rare localization.

AS may be formed during embryogenesis, developing from the left side of the dorsal mesogastrium as a result of imperfect fusion of separate splenic masses.

The localization varies widely, but the most common locations are the splenic hilum (75%) or the pancreas tail (20%), as well as the greater omentum, along the greater curvature of the stomach, and the small and large intestine mesentery [1-3].

The differential diagnosis of pelvic AS could include adnexal mass features such as enlarged lymph nodes, subserosal fibroid, ovarian tumors, organized hematoma, and tubo-ovarian abscess.

Pelvic AS is generally determined during radiological investigations or during open or laparoscopic surgeries.

Presentation and pathogenesis

Radiological findings

CT

They are typically rounded or sessile nodules, and have density and enhancing characteristics similar to the rest of the spleen, or expected density of the spleen if there has been a splenectomy.

MRI

Signal characteristics are similar to normal spleen [2]

- **T1:** hypointense
- **T2:** hyperintense
- **T1 C+ (Gd):** heterogeneous enhancement

Nuclear medicine

Tc-99m sulfur colloid scan

Technetium Tc 99m sulfur colloid scintigraphy can identify reticuloendothelial activity in the liver as well as in the spleen and is useful in identifying ectopic functional splenic tissue in the abdomen. Similarly, heat-denatured ^{99m}Tc-labeled red blood cell imaging, specific for splenic tissue, provides useful informa-

tion for spleen size and localization as well as for the specific red blood cell sequestration function of the splenic tissue. A wandering spleen is diagnosed by normal uptake of radiotracer by functioning splenic tissue in an abnormal location in the abdomen.

Despite pelvic AS being a rare, usually asymptomatic, pelvic mass condition, it should be considered in the differential diagnosis of symptomatic pelvic masses.

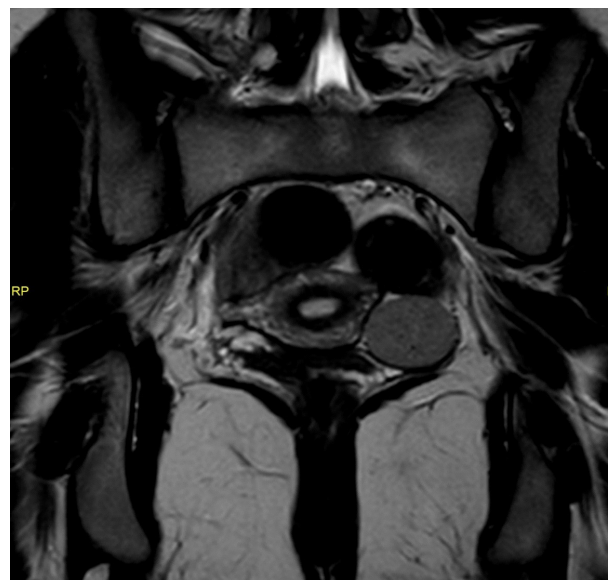


Figure 2: Coronal T2 Weighted TSE Image.

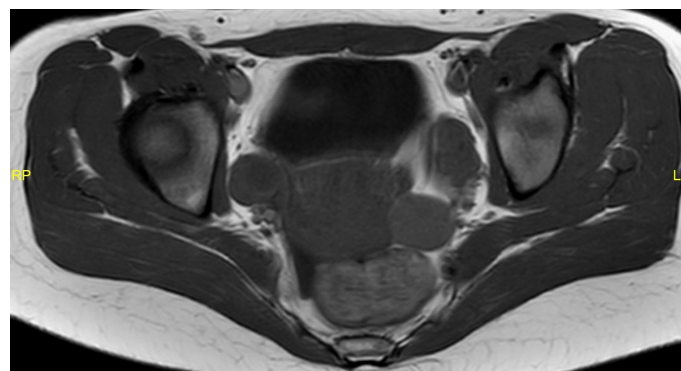


Figure 3: Axial T1 Weighted TSE Image.

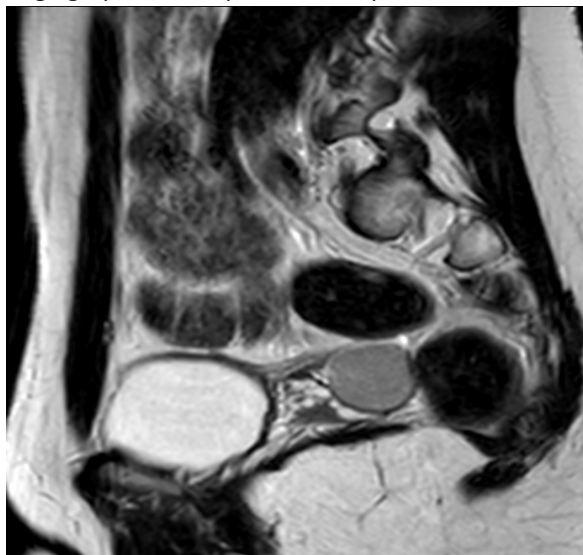


Figure 1: Sagittal T2 weighted TSE Image.

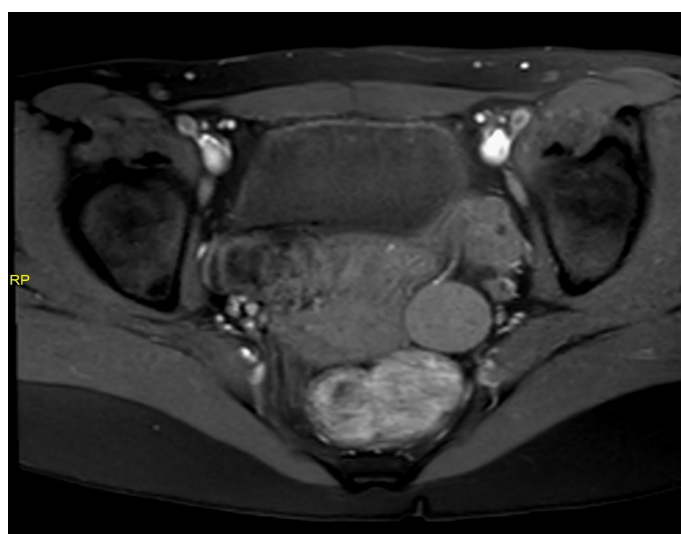


Figure 4: Fat Sat T1

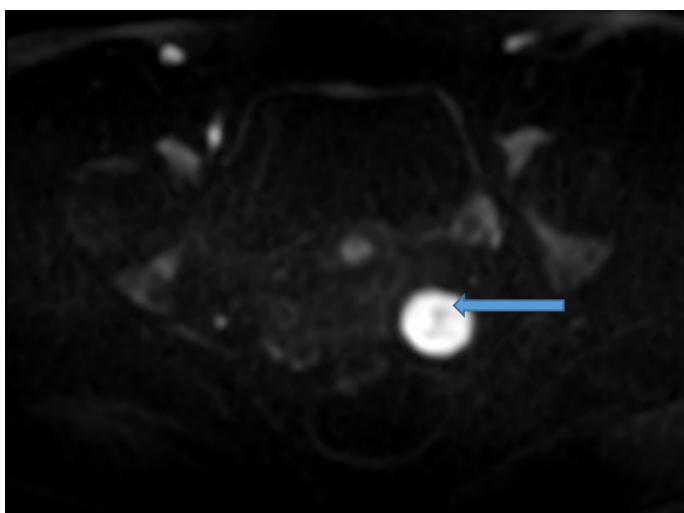


Figure 5: Axial DWI 1500 Image.

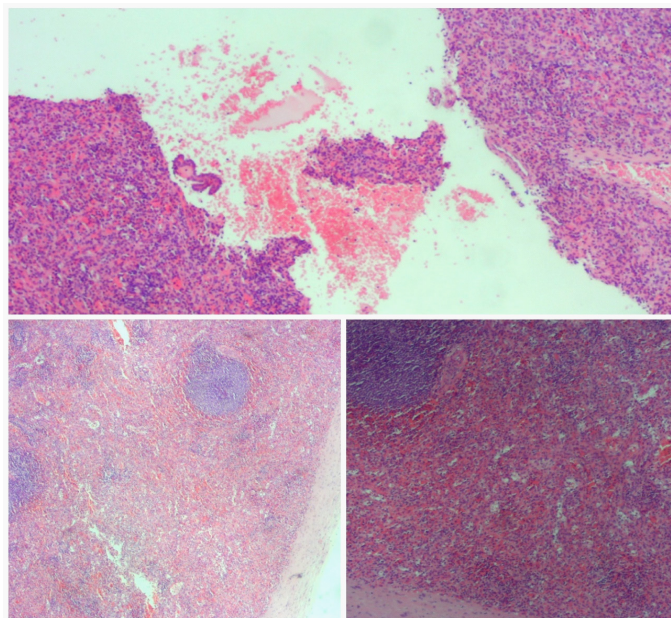


Figure 6: Histopathology Images.

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