

OVARIAN DERMOID WITH A MESENTERIC CYST- AN UNUSUAL CO-OCCURRENCE

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PRESENTATION OF CASE

A 30 year old female patient presented with chronic dull-aching abdominal pain since the past 3 years. There was no specific localization of pain. There was no fever or any significant medical history, and she was a non-diabetic and normotensive. The patient had no history of surgeries in the past. She was evaluated initially by ultrasonography, which showed a well-defined, thick walled heterogeneous solid-cystic lesion arising from the right adnexa measuring approximately 10 x 7.8 x 10.3 cm in size (TR x AP x CC). The lesion also had few areas of calcification within. On colour doppler examination, the lesion showed no evidence of vascularity. The lesion could not be delineated separately from the right ovary.

Further, there was a cystic lesion in the left adnexa measuring 9.5 x 8.7 x 10.7 cm in size with few septa within. A computed tomography of the patient confirmed the above findings. The left ovary was not visualized on imaging. A Contrast enhanced computed tomography performed a week later showed no significant enhancement of the right ovarian lesion. However, the cystic lesion earlier noted in the left adnexa was surprisingly absent on this study. The same lesion was found in the left lumbar region, indicating mobility of the lesion. In addition, the mobile cyst also showed few enhancing septa and septal nodules within. MRI of the patient confirmed the above and the left ovary was seen separately from the lesion.

The intraabdominal cyst in discussion was noted arising from the small bowel mesentery with a pale yellow fluid within it. The right ovarian cystic lesion was well encapsulated with a greasy fluid and bony components within. Both were surgically excised.

DIFFERENTIAL DIAGNOSIS

- Mesenteric Cyst
- Enteric Cyst
- Omental Cyst
- Loculated Ascites
- Peritoneal Inclusion Cyst.

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PATHOLOGICAL DISCUSSION

The rarity of mesenteric cysts make them difficult to diagnose both clinically and pathologically. Cysts can be unilocular or multilocular, and the contents may be serous, chylous and rarely, haemorrhagic fluid. Calcification may be present within the walls. The cysts are often asymptomatic and hence have the tendency to grow to giant proportions, as with the present case. Simple mesenteric cysts have a fibrous wall without a defined muscular layer, as was the case in point. The cyst was unilocular and contained a serous pale yellow fluid while microscopy revealed predominant lymphocytic picture with reactive mesothelial cells.

Benign teratomas (or Dermoid cysts) are the most common of all the ovarian germ cell tumours. These tumours usually have excellent prognosis. As the name suggests, these lesions contain cells of different germ cell layers. They may be solid, cystic or both. The right ovarian lesion consisted of a greasy material with evidence of keratin (skin), teeth and hair within it.



Figure 1. Plain Computed Tomography Image Showing the Right Ovarian Dermoid Cyst



Figure 2. Contrast Enhanced Computed Tomography Image Showing the Mesenteric Cyst

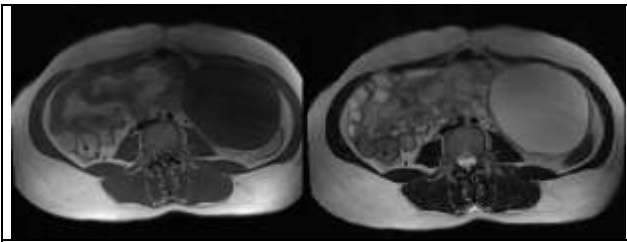


Figure 3. T1 and T2 Weighted MRI Images Showing the Mesenteric Cyst

DISCUSSION OF MANAGEMENT

Dermoid cysts (mature cystic teratomas) are a benign type of ovarian germ cell tumours. These constitute the most common ovarian neoplastic lesions found in adolescents. Teratomas can have varied appearances and presentation, and most often the smaller ones being asymptomatic and detected incidentally. On CT, fat attenuation with or without calcification with a cystic lesion is diagnostic of a mature teratoma.¹ The sebaceous component on MRI typically demonstrates hyperintensity on T1-weighted images and an intermediate signal on T2-weighted images. The fat component can be conveniently identified with fat suppression sequences. MRI is almost 100% sensitive for ovarian dermoid masses.²

Mesenteric cysts are benign, but rare intra-abdominal tumours.³ They can occur along the entire length of mesentery, the small bowel mesentery being the most common site followed by large bowel mesentery. Benevieni (1507), an anatomist of Italian origin was the first to describe a mesenteric cyst during an autopsy.⁴ These cysts are usually of lymphatic or mesothelial origin, but may also be of enteric or urogenital origin.⁵ Mesenteric cysts are generally considered mobile in nature. But in certain cases, like a big cyst, the mobility is not well appreciated. Ultrasound being a dynamic modality of investigation aids in the confirmation of the same. On imaging, the lesion shows typical characteristics of a cyst. Basic aim in the treatment of mesenteric cysts is the total removal of cyst as recurrence rate following a successful operation is very low.⁶

FINAL DIAGNOSIS

- 1) Right Ovarian Dermoid Cyst.
- 2) Mesenteric Cyst.

SUMMARY

Dermoid cysts and mesenteric cysts are two entirely different entities with specific characteristics and presentation. The presence of the two in a same patient might be a mere coincidence, but nevertheless it emphasizes on the classical teaching that being carried away by a finding and not attempting to look for other possible lesions may prove disastrous. The case also highlights the importance of higher investigative modalities such as an MRI in such unusual presentations. Mesenteric cysts being a rare entity, the detection of this entity in a young female with a coexisting dermoid tumour is unusual and no similar presentation has been reported in the literature.

Abbreviations:

- TR – Transverse
- AP – Antero-posterior
- CC – Cranio-caudal
- cm – Centimeter
- CT – Computed tomography
- MRI – Magnetic Resonance Imaging

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