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AN UNUSUAL SMALL BOWEL LEIOMYOMA CAMOUFLAGING AS ADNEXAL MASS

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ABSTRACT

In this case report an interesting and rare case of small bowel leiomyoma is discussed which was initially operated in the suspicion of adnexal mass. Gastrointestinal stromal tumours (GISTs) are the most common mesenchymal tumours of the gastro-intestinal tract, and are often asymptomatic.[3] Occasionally presenting as pelvic mass, these tumours often led to misdiagnosis of gynaecologic diseases. Gynaecologists should consider possibility of tumours of non-gynaecological origin in evaluation of pelvic mass in the differential diagnosis of patients presenting with an atypical pelvic mass.

KEYWORDS

INTRODUCTION –

Most common tumours affecting women causing pelvic discomfort and heavy menstrual bleeding are uterine leiomyomas. [1]

Rarely leiomyomas can originate from the small bowel (around 1%). Majority of them arise from jejunum followed by ileum and rarely from duodenum.[2] Gastrointestinal stromal tumours (GISTs) are of mesenchymal origin arising from gastro-intestinal tract. [3] These tumours may present as a pelvic mass often leading to the misdiagnosis.

Here we report a case, a lady with small bowel leiomyoma presenting itself as adnexal mass.

Case Report –

A 40-year-old, multigravida, homemaker, resident of Mumbai, complained of lower abdominal pain more on left side, occasional dysmenorrhoea since 6 months. Her medical and surgical history was unremarkable, and her menstrual history was normal. She had had two spontaneous vaginal deliveries and one abortion; tubal ligation was done. There was no fever, change in bowel habits, per-rectal bleeding, or vomiting. She was not pale, nor jaundiced. Abdominal examination revealed a large, round, firm, palpable mass of 10x8cm size on the left side arising from pelvis. On per vaginal examination uterus was bulky with fullness in left fornix, a 10cm mass was felt arising from left adnexa. Full blood count showed white cell count 8.1 x 10^9/l, haemoglobin 10.9g/dl and platelet 174 x 10^9/l. Pelvic sonography noted an anteverted bulky uterus(6.5x5.2x6.1cm) with a small anterior myometrium fibroid(1.7x1.2cm). A solid cystic mass of 10.1 x 5.1cm seen arising from left adnexa, left ovary not seen separately. (Fig. 1).

CT scan findings noted that a 10x7cm multiloculated solid cystic mass was seen arising from left adnexa, abutting small bowel loops? ovarian neoplastic aetiology (fig. 2,3,4). Tumour markers were performed, and the CA-125 was found to be raised at 85.10 U/ml. PAP smear was negative for intraepithelial malignancy.

Patient was counselled for exploratory laparotomy, abdomen opened. There was a 12x10 cm solid mass with multiple superficial cystic areas, seen arising from segment of small bowel and adherent to uterine cornu on left side, left ovary and fallopian tube. (Fig. 5) Uterus was normal in size, right sided ovary and fallopian tube were normal looking. After releasing cornual adhesion no plane of dissection was found between tumour and small bowel. General surgeon and onco-surgeon were called upon, intra op diagnosis of GIST was made. Small bowel resection with primary anastomosis along with omentectomy was performed by the surgical team followed by Total abdominal hysterectomy with bilateral salpingectomy and left sided oophorectomy. Specimens were sent for histological examination (HPE).

HPE of the mass and the ileum resection showed low grade spindle cell tumour, smooth muscle origin, favours leiomyoma. whilst that of the uterus was intramural leiomyomata with adenomyosis. (Fig 6)

Immunohistochemistry staining showed positivity for SMA, Desmin while being negative for C-KIT, DOG 1and CD 34

DISCUSSION –

This case highlights the fact that while evaluating an adnexal mass the possibility of non-gynaecological causes should be considered. We also learnt that histological and immunohistochemical analysis for making definitive diagnosis of gastrointestinal leiomyomas or GIST is required and diagnosis cannot be made on alone on size, gross features or site of origin.[4] Leiomyoma would stain positively for SMA and Desmin. DOG1 is a sensitive and specific marker for GIST diagnosis. [3]

GIST is extremely rare, with a reported incidence of 20 per million per year, where 20-30% are malignant [5] It is a mesenchymal tumour, majority arise from stomach. Histologically, it ranges from pure spindle cell neoplasm to epithelioid neoplasms. Smooth muscle tumours histologically comprising spindle cells, of pelvic origin are often mistaken as uterine leiomyoma or ovarian fibroma [6]

In this case, as the mass was adherent to the uterus, and it grew extraluminally from the small bowel, it created a diversion from the actual diagnosis.

Giorgio Carlomagno et all had reported a case of GIST with myxoid variant in a 42 years old woman presenting as an epigastric mass associated to an ovarian cyst and elevated CA-125. Histologically, the lesions showed spindle cell proliferation in myxoid stroma [7]

Yutaka Morimura et al have also reported similar incidence where patient was operated in the suspicion of ovarian neoplasia and intraoperative findings were suggestive of GIST which was confirmed by histopathology.[6]

See A, Tan G and Teo M et al reported a case of atypical uterine leiomyoma presenting itself as a gastrointestinal tumour (GIST) on imaging and was found to be uterine leiomyoma on exploration. [8]

Preoperative diagnosis of a GIST or leiomyoma is difficult, as it is rare with varied presentation and has no distinguishing characteristics on imaging studies [9]

First-choice imaging modality is Contrast-enhanced CT scan for patients with suspicious abdominal mass. Although there are no specific CT findings for GIST tumours, typically they look like

inhomogeneous masses with few areas of haemorrhage and necrosis.[10]

Complete surgical resection is the treatment of choice, and biological therapy with imatinib mesylate is recommended for cases with incomplete resection or unresectable tumours, and when tumours have progressed to metastatic disease.

During surgery, a multiloculated solid mass with superficial cystic areas noted arising from small intestine. It was adherent to left uterine cornu and left adnexa. Intra operative diagnosis of GIST was made therefore total abdominal hysterectomy with bilateral salpingectomy and left sided oophorectomy was done along with small bowel resection with primary anastomosis.

CONCLUSION –

Abdominal cavity is like a pandora's box. Small bowel tumour may masquerade itself as a gynaecological diagnosis. Often these tumours lack distinct boundaries of origin making it difficult to be identified on radiology as well. Hence during evaluation of any case of atypical pelvic mass Gynaecologists should consider possibility of tumours of non-gynaecological origin as differential diagnosis.

Fig.5 Tumour arising from small bowel

Fig.1 USG showing tumour

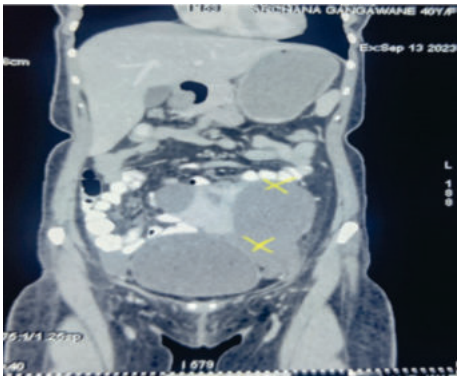

Fig.4 CT scan coronal view

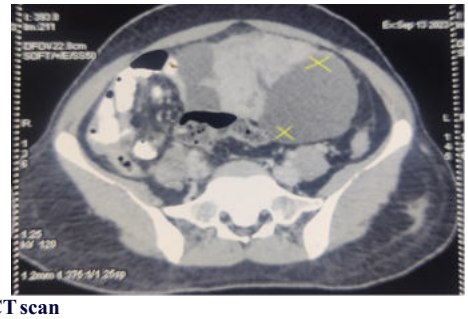

Fig 2 CT scan

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