



EFFECTIVE MANAGEMENT OF HUGE LEIOMYOMA MASQUERADING AS OVARIAN MASS – A CASE REPORT

Pathology

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ABSTRACT

Objective: Fibroids or Leiomyomas are known to arise from uterus and are of varying sizes. The location of fibroids, size and their features on imaging due to degeneration mimics ovarian mass. These can be differentiated from ovarian mass by their presenting symptoms, imaging features and by histopathological examination, diagnosis is confirmed prior to surgery. **Case report:** Our case presented with diffuse pain all over the abdomen with distension associated with heavy menstrual bleeding. On ultrasonography huge mass arising from left adnexa mimicking solid ovarian mass was noted. Further evaluation done by PET CT (positron emission tomography-computed tomography) scan and tissue biopsy from the mass which were suggestive of fibroid probably arising from broad ligament. Intraoperatively mass was arising from lateral wall of uterus from suggestive of pseudo broad ligament fibroid and hence she underwent abdominal hysterectomy and bilateral salpingectomy. Her postoperative period was uneventful. **Conclusion:** Pelvic masses locating in adnexal region needs complete evaluation by proper imaging and histopathological confirmation in case of any suspicion, there by preventive extensive surgeries and reducing morbidity among patients.

KEYWORDS

Huge fibroid, Leiomyoma, ovarian mass, pseudo broad ligament fibroid, pelvic mass

INTRODUCTION:

Leiomyomas are the most common benign tumours of uterus among women of reproductive age group. They constitute about 20-30% of uterine masses¹. Around 80% of women are asymptomatic other symptoms are pain abdomen, dysmenorrhoea, heavy menstrual bleeding, prolonged menstrual bleeding. Broad ligament fibroids account for less than 1% of all leiomyomas². A pseudo broad ligament fibroid arises from the lateral surface of the uterus. A true broad ligament fibroid is conventionally believed to develop from mesenchymal remnants in the uterus, or smooth muscle of blood vessels in the broad ligament. The diagnostic dilemma arises when leiomyomas undergo degenerative changes. Most common degeneration is hyaline degeneration. Massive cystic degeneration of broad ligament fibroids mimics ovarian malignancy.

Case Report:

A 45year old P1L1 tubectomised woman presented with complaints of pain all over abdomen with mild intensity, heavy and prolonged menstrual bleeding for duration of four months. Her previous menstrual cycles were regular, with moderate flow for five days duration. She had no other comorbidities. On examination she was moderately built and well nourished, per abdomen examination revealed a vague mass occupying suprapubic region, left iliac fossa, left lumbar region left hypochondrium extending up to epigastrium and there was no ascites. There was no tenderness felt over the abdomen. Per speculum and per vaginal examination were normal, uterus was about 10weeks size separately felt. On ultrasonography huge abominopelvic mass was noted indenting the epigastrium. PET-CT showed a large soft tissue density lesion with heterogeneous nodular enhancement in left half of pelvis and abdomen measuring 29 x19.5 x12.8cm. Lesion was occupying anterior to urinary bladder and uterus abutting them extending up to left peri splenic space, left ovary was not visualised separately, lesion was displacing bowel loops anteromedially and compressing aorta and left iliac vessels likely broad ligament fibroid with differential diagnosis of left ovarian solid mass lesion probably of malignant origin. Her routine investigations were within normal limits, CA-125-29.3, CEA-1.02 which were normal. FNAC from the mass suggestive of leiomyoma with hyaline degeneration. Laparotomy was done, intraoperatively 30 x 20 x15cm huge mass as shown in figure 2, was arising from left lateral wall of uterus extending into broad ligament laterally up to pelvic wall, inferiorly into deep pelvis, superiorly spleen. There was no ascites, flimsy adhesions were noted with adjacent bowel and bladder,

adhesions were released. Intraoperative features were suggestive of degenerated pseudo broad ligament fibroid, proceeded with total abdominal hysterectomy and bilateral salpingectomy. A 2cm tear was noted in the splenic capsule and repair was done. Bilateral ovaries were normal. Histopathological report of the mass was fibroid with hydropic degeneration and hyalinisation, as depicted in Figure 1 A and 1B. Postoperative period was uneventful and suture removal was done on postoperative day 14 and patient got discharged on day -15.

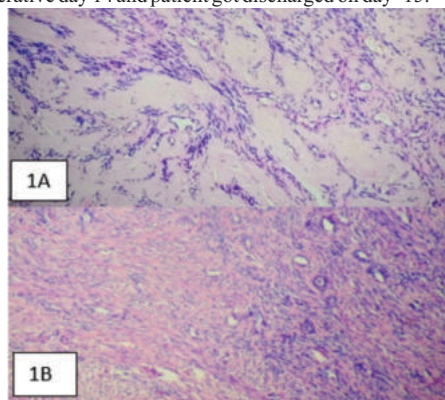


Fig 1A: Fascicles of spindle cells with hyalinized stroma (Haematoxylin & Eosin stain, 10x X 40x magnification)

Fig 1B: Hyalinized stroma with capillaries (Haematoxylin & Eosin stain, 10x X 10x magnification)



Fig 2: Huge pseudo broad ligament fibroid arising from left lateral wall of uterus

DISCUSSION:

Fibroid/Leiomyoma are the most common benign tumours of female reproductive tract and up to 80% are asymptomatic. They can present with menstrual complaints such as heavy and prolonged menstrual bleeding. These fibroids arise not only from the uterus but also from broad ligament, cervix, urethra, bladder, vulva, vagina³. The size of the fibroid can vary from sub centimetric to term size uterus. The most common extrauterine site of fibroids is broad ligament and its incidence is less than 1%⁴. Broad ligament fibroids are classified as true and pseudo broad ligament fibroids. True broad ligament fibroids arise from smooth muscle cells of broad ligament whereas pseudo broad ligament fibroids arise from uterine wall and grows laterally. Pseudo broad ligament fibroids are more common (80%) than true broad ligament fibroid (20%). Our case is having huge fibroid arising from left lateral wall of uterus occupying pelvis, left lumbar and left hypochondrium. The presenting complaints are diffuse mild pain all over the abdomen due to stretching of abdominal wall by the huge fibroid. She had complaints of heavy menstrual bleeding which is one of the differentiating features from ovarian mass. The symptoms ovarian masses usually will be pain abdomen of dull aching type and they may not have menstrual complaints. On transabdominal ultrasonography left ovary is not seen separately from the mass, there by mimicking the left ovarian solid tumour. PET-CT also suggestive of broad ligament fibroid with differential diagnosis of solid ovarian tumour. Hence proceeded with FNAC of the mass. Histopathology of FNAC suggestive of as fibroid/Leiomyoma. Though fibroids have their own identity in radiology, because of its degenerative changes and anatomical location mainly broad /pseudo broad ligament fibroids they mimic adnexal/ovarian masses. Myomectomy is the treatment of choice in women who wish to preserve their fertility and among women who have completed their family with such huge fibroid, hysterectomy is preferred. Most common organ injured during surgery is ureter as it is very close to lateral fibroids either true or pseudo broad ligament fibroids and surgery is challenging in such cases. Risk of injury to bowel, bladder is also high due to its anatomic location, size and adhesions with these structures. This case had splenic capsular tear due to adhesions. Till now very few cases has been reported with such huge size of pseudo broad ligament fibroid with hydropic degeneration. These fibroids should be differentiated from ovarian mass by imaging and can be confirmed with histopathological examination there by preventing extensive surgery in young women and salvaging the uterus and ovaries. Identification of ureter along its course in the pelvis is the important step to prevent injury to the ureter during surgery reducing postoperative morbidity.

CONCLUSION:

Huge broad/pseudo ligament fibroids are challenging in differentiating from ovarian masses. They appear like solid ovarian mass on imaging due to their degenerative changes. Any dilemma in differentiating such huge fibroids from ovarian masses can be confirmed by histopathological examination and can be managed accordingly.

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Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical Statement

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional ethics committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards Human and Animal Rights. This article does not contain any studies with animals performed by any of the authors

Informed Consent Informed written consent has been obtained from the patient for the publication of the case report and images

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