



ORIGINAL RESEARCH PAPER

Gynaecology

LARGE BROAD LIGAMENT FIBROID – DIAGNOSIS AND MANAGEMENT

KEY WORDS:

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ABSTRACT Broad ligament fibroids represent a small percentage of fibroids. Often asymptomatic, they present a diagnostic dilemma. Differentiating between a broad ligament fibroid and an ovarian mass is vital to rule out an ovarian malignancy and plan the surgical management of either. CT/MRI, along with tumour markers provide tools which can help to diagnose between the two. Operating on a broad ligament fibroid presents its own set of surgical challenges because of the distortion of the pelvic anatomy by a large fibroid and proximity to the ureters.

Introduction

Fibroids are the most common benign tumours of the uterus. The uncommon sites for fibroids include the broad ligament, cervix, and peritoneum. The broad ligament is a peritoneal fold that attaches the uterus, fallopian tubes, and ovaries to the pelvis. Disorders of the broad ligament are rare. The most common solid tumour of the broad ligament is a leiomyoma. Broad ligament fibroid can originate from the uterus and invade the broad ligament or it can originate from the broad ligament itself. These benign tumours are usually asymptomatic. However, if the leiomyoma reaches significant size, it can distort the anatomy of the pelvis, pushing the uterus to the contralateral side and it can potentially compress the ureter, which leads to hydronephrosis.

Our reported case was 45 yr old lady admitted on 11/8/17 with complains of abdominal discomfort and pain since few months, it was gradual in onset and progressive with distention of abdomen. No bowel, bladder or menstrual complains. Obstetric history: Two children delivered normal. No other significant medical or surgical history.

Investigations

Transabdominal ultrasound dated 9/8/17 showed right ovary measuring 22 X 19 cms and a solid lesion of size 17 X 16 cm with minimum vascularity within it. Provisional diagnosis of ?right ovarian cystadenoma was given. MDCT scan of abdomen and pelvis dated 12/8/17 showed a moderately large mass lesion seen occupying peritoneal cavity in abdominopelvic region. Hypoattenuated with whorled pattern measuring 23.4X17.5X 13.4 cm ?Right fibroid ?right ovarian tumour. Ca 125 level dated 12/8/17 was 12.5 IU/L

Intraoperative findings

Intraoperatively, a 23X24 cm sized fibroid was noted arising from the uterine fundus and extending into the right broad ligament. The right fallopian tube and round ligament were stretched over the mass, right ovarian tissue visualized not separately from the mass. Rest uterus was normal, left ovary and fallopian tube were normal. The mass soft cystic in consistency with areas of increased vascularity. As the tumour was distorting the pelvic anatomy, careful dissection was done starting from the right infundibulopelvic ligament, taking care to avoid ureteric injury. Excision of the specimen was done along with a total abdominal hysterectomy with bilateral salpingo oophorectomy. It was a false broad ligament fibroid. Cut surface of the tumour showed grey white mass with multiple cystic areas.



Figure 1.

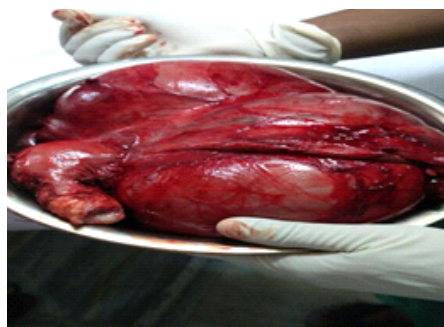


Figure 2.

Histopathology

Gross examination: Uterus with cervix with bilateral adnexa and large ligament fibroid measuring 20 cm x 14 cm x 8 cm. Uterus with cervix measuring 9 cm x 4 cm x 2 cm. Rt fallopian tube measuring 1.5 cm. Rt ovary measuring 4 x 3.5 x 0.4 cm. Left ovary measuring 4 x 3 x 0.5 cm, externally congested blackish in colour on cut section serous fluid reddish in colour.

Microscopy : Uterus – Endometrium proliferative phase

Myometrium – Sections studied reveal a well circumscribed tumour arranged in fascicles and bundles. The individual tumour cells are spindle shaped with benign nuclei. No mitotic activity seen.

Right ovary – corpus luteum

Left ovary – Cyst lined by simple benign cuboidal epithelium containing hemorrhage.

Impression: Leiomyoma with proliferative phase of endometrium and chronic cervicitis and hemorrhagic cyst of right ovary

Discussion

Leiomyomas are the most common benign tumours of the uterus and are commonly found within the body of the uterus. The less common sites for leiomyomas/ fibroids include the broad ligament, cervix, peritoneum. Broad ligament fibroids may be true or false, with 80 % having primary origin in the body of the uterus and 20 % originating within the folds of the broad ligament, known as true broad ligament fibroids. While in most cases broad ligament fibroids are asymptomatic, ones that achieve large size or undergo degeneration may cause symptoms such as pelvic pain or palpable abdominal mass. Pain may be present as a result of compression of adjacent organs or torsion of fibroid. A broad ligament fibroid often presents a diagnostic dilemma as a result of the differentials which include ovarian neoplasm, especially in the presence of complications such as hyaline, cystic or red degeneration or torsion.(4).TVS and CT/MRI play an important role in differentiating a broad ligament fibroid from an ovarian (possibly malignant) neoplasm(4). Ca 125 levels help in ruling out a possible ovarian malignancy, especially epithelial ovarian cancers which are most common.(2) Another major concern when dealing with broad ligament fibroids is the complications arising from distortion of pelvic anatomy. Identifying the ureters and the excision of the fibroid poses a challenge in the management.(3) Most convenient method of surgical management involves identification of the infundibulopelvic ligament, tracing the course of the ureter and once identified, keeping medial to the same and proceeding with myomectomy or total abdominal hysterectomy as per patient characteristics. In case of suspicion of malignancy intraoperatively, a frozen section can be sent for to determine the further course of surgery and post operative management.

Conclusion

Extrauterine fibroids are rare and are although benign they may mimic malignant tumours at imaging studies and may pose a challenge for planning surgical excision. The symptoms, signs and presentation on the imaging modality such as USG or MRI depend up on the location of the fibroid, its size and presence or absence of degeneration. The differential diagnosis of a possible ovarian neoplasm should be considered when dealing with an adnexal mass with large size, increased vascularity and when the ovary is not visualised separately. The treatment of choice for a benign broad ligament fibroid is surgical excision.

References:

- (1) Hada A, Sen S. Rare case of broad ligament fibroid with cystic degeneration. Int J Reprod Contracept Obstet Gynecol 2016;5:3226-8.
- (2) Leelavathi, Roy, P., Triveni, K. and Impana, S. (2015) Broad Ligament Fibroid Mimicking as Ovarian Tumour. Open Journal of Obstetrics and Gynecology, 5, 665-668.
<http://dx.doi.org/10.4236/ojog.2015.511093>
- (3) Rajput DA, Gedam JK. Broad Ligament Fibroid: A Case Series. IJSS Case Reports & Reviews 2015;1(11):8-11.
- (4) Rajanna DK, Pandey V, Janardhan S, Datti SN. Broad ligament fibroid mimicking as ovarian tumor on ultrasonography and computed tomography scan. J Clin Imaging Sci 2013;3:8.