Pedunculated Fibroid Mimicking an Ovarian Cancer

Kabin Bhattachan, Aruna Karki, Ganesh Dangal, Hema Kumari Pradhan, Ranjana Shrestha
Department of Obstetrics and Gynaecology, Kathmandu Model Hospital, Kathmandu

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ABSTRACT

Large myoma may show various type of degenerative change and have alteration of radiological view. Subserosal or pedunculated fibroid with cystic degeneration may mimic complex ovarian mass on radiological imaging. A 34 year female, para one, with normal menstrual period presented with radiological diagnosis of complex adnexal mass and CA 125 value 100 u/ml. Postoperative finding revealed cystic degeneration of pedunculated subserosal fibroid receiving blood supply from adherent omentum.

Keywords: : Cystic degeneration, pedunculated fibroid, complex ovarian mass.

INTRODUCTION

Fibroid is most common benign tumor originating from smooth muscle of uterus. Tumor is composed of smooth muscle and varying amounts of fibrous connective tissue so named as leiomyoma or fibroid.[1] The prevalence of fibroid is highest between 35-45 years.[2] The fibroid are three type on the basis of their location; intramural, submucosal and subserosal. When subserosal fibroid may become attached to uterus with small pedical then is called pedunculated fibroid. Fibroid can go into different types of degeneration like hyaline, red, cystic, fatty and rarely sarcomatous change. When cystic degeneration occurs, the fibroid become soft and cystic. On imaging with ultrasonography they appear like muti-loculated cyst with areas of cyst and solid areas giving the impression of complex ovarian mass.[1] Even CT scan and MRI some time fail to diagnose the pathology. So it is important to put differential diagnosis of fibroid with cystic degeneration when evaluating any adnexal mass.

CASE

Thirty four year female para 1 presented to our OPD with incidental finding of abdominal mass on routine ultrasonography for non-gynecological cause. She had good appetite with regular bowel and bladder habit. She was asymptomatic except noticed slight abdominal distention over the years. She had regular cycle with non significant past medical and surgical illness. On physical examination, her general condition was normal with normal vitals. Abdomen was distended giving impression of pregnant status. It was soft and non tender. Flanks were full, umbilicus was flat and slightly pushed up. Soft and cystic non-tender mass of 26 week gravid uterus was palpable with restricted mobility and ill defined border. On vaginal examination, cervix was normal and a huge mass was palpable on bimanual examination. Uterus could not be palpated separately. USG revealed large multiloculated cyst measuring 14.5 X 7.1 cm with multiple internal septation and few solid component with minimal vascularity in the right adnexa suggestive of complex ovarian cyst. Serum tumor marker, CA 125 was 100 u/ml and her calculated RMI (risk of malignancy index) score was 300 (USG score 3 x premenopause 1 x CA 125 level 100) which is highly suspicious for malignant ovarian tumor. Then CT scan was done which revealed complex cystic solid mass of 12 x 9 x 9cm predominantly cystic with peripheral wall enhancement/ enhancement of solid component and multiple thick septae noted in the pelvis. Minimal fluid in pouch of douglas. Features are most likely of malignant ovarian tumor (mucinous cystadenocarcinoma) [Figure-1].

CORRESPONDENCE

Dr Kabin Bhattachan
Department of Obstetrics and Gynaecology, Kathmandu Model Hospital
Phone: +977-9851063726; Email: kabin_b@hotmail.com

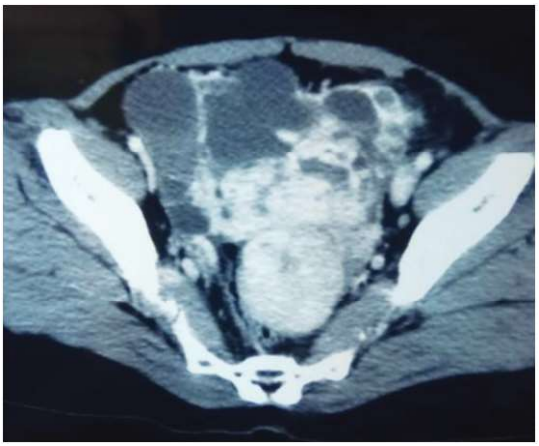

Figure 1: CT image of myoma

However, there were no other peritoneal deposits and retroperitoneal lymphadenopathy. She was well counseled about the disease condition and need of staging laparotomy with frozen section biopsy to proceed ahead. Informed consent was taken and laparotomy was done with mid-line incision on date 14th December 2018. The operative findings were, ascitic (slight haemorrhagic) fluid of around 100ml. There was a pedunculated fibroid of 12 x 10 cm with irregular and bosselated surface. The fibroid was adherent to omentum from which it was receiving feeding vessels. The mass was attached to fundus of uterus with thin pedical. Uterus and bilateral ovary and tubes were normal and free of adhesion. Considering her age and fertility desire, myomectomy was performed. Cutsection of the mass showed pale white, soft, edematous multiple cystic space with areas of clear serous fluid and haemorrahgic fluid in some loculi [Figure-2].

Figure 2 : Cut section of myoma Specimen

Rest of the abdominal organ were normal. The histopathological examination revealed leiomyoma with areas of cystic degeneration. Her postoperative period was uneventful. She was discharged on day five with final impression of pedunculated fibroid uterus with cystic degeneration.

DISCUSSION

Fibroid or leiomyoma are the most common tumor. They are commonly found in reproductive age indicating their estrogen dependency. Their size may vary from microscopic to giant tumor weighting more than 25 lb.[1] As the fibroid grow up in size they may go into various type of degeneration. Hyaline is the most common type of degeneration occurring in 60% of cases.[3] The cut surface of hyalinized area is smooth and homogeneous and does not show whorllike arrangement of the leiomyoma. Eventually these area may become liquefied and forms cystic cavities filled with clear or gelatinous fluid leading to cystic degeneration which occur in 4% of cases.[1,3] Moreover subserous and specially pedunculated fibroid may outgrow its blood supply. The omentum become adherent to the surface of myoma and supply blood to prevent from undergoing ischaemic necrosis.[1] The pedical may sometime detach from uterus and survive independently known as wandering or parasitic fibroid. These types of tumor with cystic degeneration may mimick complex ovarian cyst making diagnosis dilemma as seen with our case. Patient with fibroids may be asymptomatic or may present with pelvic pain, dysmenorrhea. menorrhagia, metrorrhagia, and some may present with pressure symptoms and rarely subfertility. Patients with subserosal and pedunculated fibroids usually are asymptomatic which are detected incidentally or when they gain large size and produce pressure symptoms or abdominal enlargement as seen our case. Ultrasonography is the first line of investigation as it is highly sensitive, cost-effective, nonhazardous, noninvasive and easily available. Fibroid are seen as area of solid mass with hypoechoic than myomertrium. But when associated with cystic degeneration changes, they appear similar to complex ovarian cyst. CT scan and MRI can be useful to define uterus, ovary and mass but they are expensive not readily accessible and are not risk free. Even these scan some time fail to detect the lesion due to their alteration of radiological feature. In our case the CT scan revealed as malignant ovarian cyst. Similar cases

were reported by Aydin et al[4] in which pedunculated fibroid with cystic degeneration and Kumari et al[5] in which broad ligament fibroid were misinterpreted as ovarian mass. Serum tumor marker can be helpful to evaluate ovarian malignancy but they are not specific. In our case CA 125 was 100 u/l. Her RMI score was 300 suggestive of malignant ovarian mass. This finding led us to misinterpret as ovarian malignancy. CA 125 are raised even in many benign condition like fibroid, endometriosis, appendicitis, tubal inflammation or infection, liver disease, hepatitis, pregnancy and others but their value are mildly elevated.[6] Moreover when patient are told that they have ovarian cancer during assessment, patient and their family will have great fears, worries and depression as well. So it is necessary for surgeon to put differential diagnosis of cystic degenerated fibroid during assessment of any complex ovarian mass and counsel accordingly.

CONCLUSIONS

Uterine myoma with extensive cystic degeneration may mimic ovarian neoplasm on radiological imaging. So it is important to put cystic degenerated fibroid as differential diagnosis when evaluating any case of adnexal or pelvic mass.

REFERENCES

1. Rock JA, Jones HW. Leiomyomata uteri and myomectomy. In:Breech LL, Rock JA, editors.Te Lindes operative gynecology. 10th ed. New Delhi: Wolters Kluwer; 2011. p 687-721.
2. Dutta DC, Konar H. Benign lesion of uterus. In: DC Dutta's text book of Gynecology. 7th ed. India: Jaypee Brothers; 201. p221-234.
3. Mayer DP, Shipilov V. Ultrasonography and magnetic resonance imaging of uterine fibroids. Obstet Gynecol Clin North Am. 1995;22(4):667-725.
4. Aydin C, Eris S, Yalcin Y, Selim H S. A giant cystic leiomyaoma mimicking an ovarian malignancy. Int J Surg Case Rep. 2013;4(11):1010-12.
5. Kumari R,Vandana, Kulshrestha V, Sharma JB, Kriplani A. A case of broad ligament leiomyoma presenting as an ovarian mass. Int J Reprod Contracept Obstet Gynecol. 2017;6:2635-7.
6. Di Saia PJ, Creasman WT, Mannel RS. Adnexal Masses. In:Gunderson CC, Mannel RS, editors. Clinical Gynecologic Oncology. 9th ed. Philadelphia: Elsevier; 2018. p231-52