An Unusual Presentation of a Non-Tender Huge Degenerative Fibroid

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INTRODUCTION

Fibroid is the most common benign tumour occurring in the reproductive age groups, the incidence is around 70%, mainly due to oestrogen. Other risk factors are nulliparity, obesity, early menarche, delayed menopause, family history, and ethnicity. Surprisingly smoking seems to reduce the risk. Other factors reducing the risk are OCP, pregnancy and lactation.

Trans-vaginal ultrasound is the gold standard investigation. But MRI is helpful in mapping the site, number, size, depth, nature of lesion and associated pelvic pathology. It also helps in differential diagnosis of fibroid mainly adenomyosis and sometimes both conditions exist together. The most common complaint in fibroids are menstrual problems like menorrhagia, metrorrhagia, dysmenorrhea, infertility, pressure symptoms on bladder and rectum. The patient may become anaemic due to blood loss, our patient in spite of her menorrhagia, her Haemoglobin was nearly normal. Our patient with such a huge fibroid of size of 28 weeks, has no history of pain and the mass found to be non-tender, in spite of extensive cystic degeneration.

PRESENTATION OF CASE

A 37-year-old lady P2L2A1 with previous history of two caesarean sections presented to the OPD. During the last childbirth 15 years ago, she had undergone caesarean section with sterilization. She presented with heavy menstrual bleeding of 5 months duration. On examination, patient was mildly anaemic, showed a non-tender 28 weeks size mobile mass. The patient was not complaining about it!!. As usual she is not aware of the abdominal swelling like other rural folks. And on bimanual examination, cervix was healthy and normal; a centralized swelling confirmed to be arising from the uterus, and fornix was free. USG shows evidence of 13 cm X 6 cm hyper-echoic central mass suggesting a submucous fibroid and 9 cm X 7 cm subserosal fibroid on the right side of cervix. Routine investigations- urine culture, CBC, clotting profile, kidney function test, chest x-ray, and ECG were normal. Her haemoglobin was 10.9 g%.

On examination, a uniformly enlarged, cystic, soft mass was felt. Uterus size was of 28 weeks. The mass appeared to be arising from the pelvis and extending upwards above umbilicus and 4 cm below xiphisternum. It was not nodular, non-tender, mobile from side to side, and the lower border was not felt.

Vaginal examination showed transmitted mobility and no groove sign which suggests uterine fibroid. USG confirmed the diagnosis. MRI was not done in our case, which would have confirmed the cystic degeneration of fibroid. We planned for total abdominal hysterectomy without bilateral salpingo-oophorectomy as the patient was young.

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DOI: 10.14260/jemds/2020/453

How to Cite This Article: Sajitha CK, Banu NV, Jasim MMP, et al. An unusual presentation of a non-tender huge degenerative fibroid. J. Evolution Med. Dent. Sci. 2020;9(29):2078-2080, DOI: 10.14260/jemds/2020/453

Submission 13-03-2020, Peer Review 09-06-2020, Acceptance 16-06-2020, Published 20-07-2020.

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DIFFERENTIAL DIAGNOSIS

- 1. Ovarian cyst-comes to our mind because of cystic nature, but the groove sign is absent here. So, the possibility of a ovarian tumour is ruled out and it is also confirmed by USG.
- 2. Pregnancy- is ruled out as the history of amenorrhea is not there and USG does not show a foetus.
- 3. Distended bladder -will disappear with catheterization.
- 4. Adenomyosis¹-almost mimics our case, it is also excluded as it is not tender, and the size is more than 14 weeks.

PATHOLOGICAL DISCUSSION

Gross appearance of fibroid is usually solid, firm, multiple, pale and rubbery with whorled cut surface. It arises from the myometrium, vascular muscle cells and two different type of fibroblasts². It is a tumour of 4 types of monoclonal origin. When it undergoes degeneration there are areas of mucoid degeneration with necrosis, haemorrhage and calcification. The necrotic liquefaction, coagulative necrosis following the ischemia, in presence of lysosomal enzymes, hydrolytic enzymes form these slimy liquids. Usually a large fibroid has a tendency to go for degenerative changes, because the tumour outgrows its blood supply. The exact aetiology for the degeneration is not known. Pain is usually a regular feature in the case of degeneration, which was absent in our case. Even degenerating fibroids have menstrual symptoms resulting in anaemia.

The pathological specimen showed increased amount of degeneration and necrosis rarely some cases have been reported with intraperitoneal bleeding and rupture.³

Preoperative diagnosis by USG is not much of help in cases of degeneration whereas MRI is helpful⁴. The degeneration is due to extracellular matrix with collagen, fibronectin and peptidoglycan. Degeneration is usually common in pregnancy, OCP consumption and mifepristone-RU 486. The cut-section showing plenty of fibrinoid necrosis material with no features of malignancy. In cases of degenerated fibroid, patients have a history of abdominal pain and distension. The degeneration in fibroid came in different flavours like hyaline degeneration (13%), cystic degeneration, red degeneration and fatty degeneration (3 % each). The centre of fibroid is liable to undergo necrosis and degeneration as the blood supply is only towards periphery where in the centre portion is devoid of blood supply undergoes ischemia and necrosis.

A rare case of sarcomatous 5 degeneration (0.1 %) occurs only in post-menopausal older women with rapid growth of tumour.

DISCUSSION OF MANAGEMENT

The treatment is always tailored accordingly to the age, parity, symptoms, site and size of the tumour and the choice of the patient. In the reproductive age, it is influenced by ovarian hormones and expected to regress in size after menopause. The problem can be dealt by medical management and or surgical modality. Each has its own advantages and disadvantages. Nowadays GnRH and selective progesterone receptor modulators (SPRM)⁶ are effective in the medical management of fibroids.



Figure 1 Fibroid



Figure 2 Fibroid



The huge fibroids with degeneration often misdiagnosed as malignant sarcoma or torsion. The option of treatment left for our patient was hysterectomy as degenerated fibroids are not fit for conservative treatment like uterine artery

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embolisation. Our patient with huge fibroids with 28 wks. size who had two caesarean sections and completed the family, having menstrual problems was not willing to retain the uterus. The cornerstone of the treatment is hysterectomy. Since our lady is only 37 yrs. old we did a total hysterectomy and retained the healthy ovaries. Intra operatively diagnosis was confirmed. Uterus measures 20 cm X 17 cm X 9 cm, a submucous fibroid 13 cm X 6 cm filling the uterine cavity with degenerative changes and necrotized tissue noted. The myohyperplasia of uterus is well marked. A subserous fibroid measuring 9 cm X 7 cm found at the right side of cervix. Submucous fibroid showed cystic degeneration. There is no capsule present, whorled appearance is lost and dribbling slimy material was found. There was myometrial hyperplasia, plenty of necrotic tissue with blood stained dribbling material amounting 100 ml was found.

Usually the degeneration fibroid cause severe pain and leukocytosis, our patient did not show marked leukocytosis, nor she had pain. Uterine artery embolisation is an alternative treatment for hysterectomy for suitable patients⁷. In this case, fibroid has undergone degeneration, which was difficult to diagnose with Ultrasound alone, in which case MRI takes an upper hand in diagnosis. It is mandatory prior to uterine artery embolization.⁸ The specimen was sent to pathology department. Diagnosis is confirmed. There is no signs of malignancy noted.

CONCLUSIONS

The fibroids when undergo degeneration the characteristics appearance is noted and diagnosed by C.T and MRI. Sometimes USG alone is not helpful. The laparotomy is mandatory for final diagnosis.

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