

ABSTRACT

Introduction: Uterine fibroids are the most common benign pelvic tumors in women of reproductive age. Most of them are asymptomatic but they are also a major source of clinical morbidity.

Aim: We present this case due to its uniqueness and diagnostic difficulties it posed.

Case Report: A 40 year old female presented to the OPD with complaints of pain abdomen on and off and heavy menstrual bleeding. Physical examination revealed a lump of 14 week size.USG and CT scan revealed intramural fibroid with cystic/mucoid degeneration. The patient had an elective total abdominal hysterectomy with bilateral salphingo-oophrectomy. Intra operatively uterus was enlarged with hydrosalphinx on the right side. Histopathological examination showed mucoid degeneration of fibroid with chronic cervicitis.

Discussion: Degenerating changes in fibroids are considered to result from excessive growth that outmatches the blood supply or mechanical compression of feeder arteries.

Conclusion: This case illustrates that degeneration of uterine leiomyoma should be considered as one of the differential diagnosis for all women presenting with abdominal pain and a large fibroid mass regardless of hormonal status or age.

Key Words: TAH BSO, Degeneration, Uterine tumours, Fibroid, Blood supply

INTRODUCTION

Uterine fibroids are the most common benign uterine tumours. Fibroids are seen in at least 40-50% of women of 35 years or older. Degeneration of fibroid usually occurs because of loss of blood supply caused by its rapid growth during pregnancy or with oral contraceptive use and so the diagnosis of degenerating uterine fibroid in a non pregnant woman is often difficult. This case is remarkable as degeneration of fibroid is extremely uncommon in a peri menopausal woman who is not on hormone therapy and degeneration of fibroid should always be considered in a large fibroid mass as its rapid growth can ultimately lead to decreased blood supply leading to its degeneration.

CASE PRESENTATION

A 40 year old female presented to OPD with pain abdomen on and off and heavy menstrual bleeding since 4 to 5 months. Her last menstrual period was on 8th Jan 22. She was P4L4 all by vaginal delivery at term. On examination patient was a febrile and all other vital signs were within normal limits. Abdominal examination showed a lump of size 14 weeks, firm, irregular and non tender. On bimanual examination the mass was enlarged more towards the right and was about about 14 week size. Right fornix was full.

INVESTIGATIONS

Routine investigations as well as special investigations were done which showed Hb 10.9g/dl, TLC 6000/ul, Platelets 1.05 lac/mm³, ESR 40, CA 125 6.6U/ml, SGPT 46 U /ml, CEA 2.15 ng/ml , S Bil 0.52 mg/dl, PT 15.4, INR 1.3.

USG showed uterus 12x5x9 cm. A large heterogeneous well circumscribed lesion occupying whole of fundus and anterior myometrium with disfigurement of uterine cavity, 7x8x8 cm suggestive of fibroid. Simple cyst in right ovary of size 5x6 cm. CT scan shows bulky uterus with heterogeneously enhancing well defined lesion in uterine myometrium of anterior wall of fundus and body causing

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CT SCAN PLATE

Figure 1: Showing bulky uterus with with heterogeneously enhancing well defined lesion in uterine myometrium.

compression of endometrial cavity posterior suggestive of intramural fibroid with likely cystic /mucous degeneration. Right simple Adnexal cyst and elongated hypodense tubular structure in right adenexa likely hydrosalphinx.

Differential diagnosis

A peri menopausal woman presenting with a large fibroid mass raised the concern of leiomyosarcoma. Together with abdominal pain, differential diagnosis includes torsion of pedunculated fibroid, infarction or degeneration as well as a ruptured fibroid.

Treatment

TAH BSO was done under combined spinal epidural anaesthesia.14 week size enlarged uterus with hydrosalphinx on right side was noted. Specimen was sent for HPE which revealed mucoid degeneration of fibroid with chronic cervicitis. Post operative period was uneventful. She was discharged on 8th post operative day.

DISCUSSION

Degeneration of uterine leiomyoma so occur when they enlarge in size and outgrow their blood supply. This is commonly seen in pregnant women or women who are taking oral contraceptive pills.¹ Hyaline degeneration is the commonest degeneration but can also co exist with



Figure 2: Showing uterine leiomyoma with ovarian cyst.



Figure 3: Showing cut section of uterus with fibroid with typical whorled appearance and mucoid degeneration.

other degeneration.² The diagnosis of degenerating uterine leiomyoma in non pregnant woman is often difficult. The inflammation in case of degeneration can cause abdominal tenderness, localised rebound tenderness on palpating, elevation of temperature and leucocytosis. All these signs and symptoms are non specific and all possible causes of acute abdomen should be considered. On rare occasions a degenerating leiomyoma can rupture and result in intra abdominal bleeding.³⁻⁵ Pre operative diagnosis of degenerative leiomyoma is often difficult and they can be commonly misinterpreted as complex adenexal cysts of ovarian origin. ⁶ This is especially true with CT scans reporting when degenerative fibroids are frequently indistinguishable from cystic ovarian masses.⁷ When women present with abdominal pain suspected to be of gynaecological origin, ultrasound is highly sensitive and often regarded as investigation of choice.

CONCLUSION

Therefore we conclude that in a woman with a large fibroid mass presenting with acute pain, degeneration of fibroid should be a differential diagnosis irrespective of her age or hormone status. Majority of leiomyomas being symptomless when they are small, there appears no relationship between presenting symptoms and type of degeneration. Symtomatology and severity depends on size of leiomyoma rather than degenerative changes.⁸

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Footnotes

Competing interest – None

Patient consent - Obtained

REFERENCES

- 1. Rein MS, Barbieri RL, Friedman AJ. Progesterone: a critical role in the pathogenesis of uterine myomas. Am J Obstet Gynecol 1995;172(1 Pt 1):14–18. [PubMed] [Google Scholar]
- Ramesh B.H,Shashikala P.Study of degenerative changes in uterine leiomyomas IJCRR Vol 03,Issue 02,Feb,2011,pg no 37-41
- 3. Tan YL, Naidu A. Rare postpartum ruptured degenerated fibroid: a case report. J Obstet Gynaecol Res 2014;40:1423–5. [PubMed] [Google Scholar]
- 4. Takai H, Tani H, Matsushita H. Rupture of a degenerated uterine fibroid as a cause of acute abdomen: a case report. J Reprod Med 2013;58:72–4. [PubMed] [Google Scholar]
- Batsu E, Akhan SE, Ozsurmeli M. Acute hemorrhage related to spontaneous rupture of an uterine fibroid: a rare case report. Eur J Gynaecol Oncol 2013;34:271–2. [PubMed] [Google Scholar]
- Kaushik C, Prasad A, Singh Y. Case series: cystic degeneration in uterine leiomyomas. Indian J Radiol Imaging 2008;18:69– 72. [Google Scholar]
- Roche O, Chavan N, Aquilina J. Radiological appearances of gynaecological emergencies. Insights Imaging 2012;3:265– 75. [PMC free article] [PubMed] [Google Scholar]
- Ramesh B.H, Shashikala P. Study of symptomatology of uterine leiomyoma with degenerative changes-IJCRR -Vol 04 Issue 07, April, 2012, pg no 104-107.