

A Case Series of Fibroids with Atypical Clinical Presentation: A Diagnostic Dilemma

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ABSTRACT

Fibroids are the most common tumors of the female reproductive system. It is impossible to determine their true incidence, although frequently quoted incidence of as high as 50% has been found in certain longitudinal studies. Typical leiomyoma is a firm nodular well-circumscribed structure arising from the myometrium. Some of these fibroids may be asymptomatic while the usual symptoms associated are heavy menstrual bleeding, dysmenorrhea, abdominal discomfort, and pressure symptoms. Fibroids can be easily diagnosed by ultrasonography and MRI. However, some cases of fibroids may present as a diagnostic dilemma due to their bizarre presentation and unusual ultrasounds and MRI reports. Here we report three cases of fibroids with atypical clinical features that resulted in difficulty in making diagnosis.

Keywords: Broad ligament fibroid, Cervical fibroid, Degeneration, Fibroid.

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INTRODUCTION

Fibroids are the most common tumors of the female reproductive system. It is impossible to determine their true incidence, although frequently quoted incidence of as high as 50% has been found in certain longitudinal studies.¹ A typical leiomyoma is a firm nodular well-circumscribed structure arising from the myometrium. They develop most commonly in the uterine corpus and less commonly in the cervix. As they enlarge, they may remain intramural or may eventually become subserosal or submucosal in location.

Some of these fibroids may be asymptomatic, while the usual symptoms associated are heavy menstrual bleeding, dysmenorrhea, abdominal discomfort, and pressure symptoms.² Fibroids can be easily diagnosed by ultrasonography and MRI. However, some cases of fibroids may present as a diagnostic dilemma due to their bizarre presentation and unusual ultrasounds and MRI reports. Here we report three cases of fibroids with atypical clinical features that resulted in difficulty in making diagnosis.

CASE DESCRIPTIONS

Case 1

A 38-year-old P2L2 female came to emergency department with chief complaint of pain in the lower abdomen region since 7 days, which was nonradiating and had increased progressively. The patient also had low-grade fever since 2 weeks. There was history of weight loss over a period of 6 months. The patient has no menstrual complaints, had regular menstrual cycles with average blood flow. On examination, the patient's abdomen was soft; no organomegaly was palpable. Extreme tenderness on palpation was present in the hypogastric region. A midline suprapubic firm mass of size of 20 weeks' gravid uterus was present. Lower limit of the mass could not be reached. Mass was extremely tender. Bowel sounds were present on auscultation. Ultrasound whole abdomen and pelvis was suggestive of a bulky uterus with a solid mass of $8.7 \times 6.4 \times 8.2$ cm at the fundus of the uterus. A large cyst of size 14.5×11.3 cm with internal septas was seen in left adnexa. The left ovary was not seen separately. The cystic mass had increased vascularity. Endometrial thickness was normal. The patient was investigated.

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Hemoglobin was 8 g% and TLC was $17000/\text{mm}^3$. The CT scan of lower abdomen and pelvis was suggestive of a large lobulated uterus with large dumbbell-shaped mass fibroid of $16.3 \times 10.2 \times 17.1$ cm projecting out from the fundal region with necrotic change as in Figure 1. Other investigations were within normal limits. The patient was posted for laparotomy after 1 unit packed red blood cells (PRBC) transfusion. Perioperatively, the uterus was enlarged. A highly vascular cystic mass was arising from the posterior surface of the fundus as in Figures 2 and 3. Total abdominal hysterectomy was done. Intraoperative bleeding was minimal. The patient was discharged on day 5 postoperatively in a satisfactory condition. Histopathology was suggestive of cotyledonoid dissecting fibroid showing spindle smooth cells with nuclear atypia.

Case 2

A 48-year-old P2L2 woman came to the obstetrics and gynecology OPD with chief complaints of pain in left flank since 4 months. Pain was intermittent spasmodic in nature. The patient had normal menstrual cycles with mild dysmenorrhea. There was history of deep dyspareunia. The patient also had history of chronic constipation since 4 months. There was no history of burning micturition or discharge per vaginum.

On examination, a firm nontender mass was palpable in the left lower abdomen. On speculum examination, cervix and vagina were apparently healthy. On bimanual examination, a

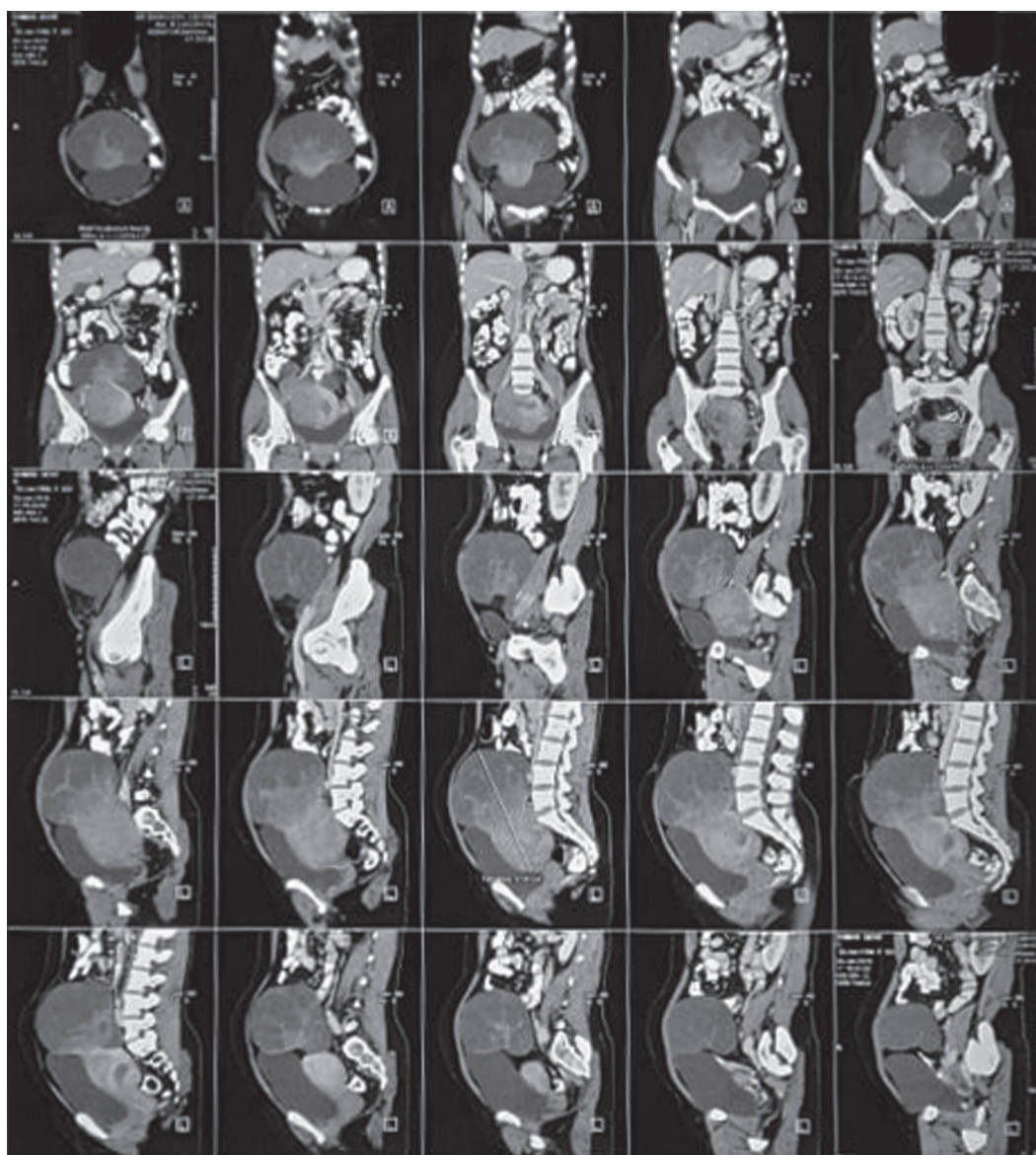


Fig. 1: Computed tomography scan showing a huge mass arising from fundal region of uterus



Fig. 2: Intraoperative picture of uterus with the cotyledenoid dissecting fibroid



Fig. 3: Gross specimen of uterus with cotyledenoid fibroid



Fig. 4: Intraoperative picture of left broad ligament multiple fibroids pushing uterus to opposite side



Fig. 5: Gross specimen of uterus with multiple broad ligament fibroids



Fig. 6: Gross specimen of distorted uterine contour with multiple posterior wall fibroids

mass of size approx. 12×15 cm was palpable in the left fornix. The uterus seemed to be pushed to the right side. The right fornix was free. The uterus was normal in size and moving with the mass on bimanual examination. A transvaginal ultrasound was done, which was suggestive of a uterine size of $8.54 \times 7.25 \times 4.35$ cm. Endometrial thickness was 4 mm. A left adnexal mass of heterogeneous echogenicity with size $12 \times 10 \times 8.5$ cm was present. The left ovary was enlarged of size $6.04 \times 4.98 \times 5.2$ cm. The mass seemed adhered to the left ovary; the right ovary was normal. The transvaginal sonography (TVS) report was suggestive of subserosal fibroid or left ovarian mass.

The patient was taken for elective laparotomy. Perioperatively, multiple fibroids (four to five in number), largest of size 5.5×7 cm, were present in the broad ligament pushing the uterus toward the right side. As shown in Figures 4 and 5, the left ovary was normal in size but a fibroid was seen replacing the utero-ovarian ligament in anatomy.

A broad ligament was opened along with uterovesical fold and posterior peritoneum. The bladder was pushed caudally to avoid ureteric injury. Total abdominal hysterectomy was done with left

salpingo-oophorectomy. Postoperatively, the patient recovered well. The patient was discharged in a satisfactory condition.

Case 3

A 42-year-old woman came to the obstetrics and gynecology OPD for pain during defecation and rectal tenesmus. The patient also complained of chronic pelvic pain since 6 months. On bimanual examination, the uterus was enlarged in size with posterior irregular masses felt in posterior fornix and right fornix. Ultrasound was showing a distorted uterus and loss of normal uterine contour with multiple hypoechoic masses arising from the posterior wall of uterus occupying the pouch of Douglas. Bilateral ovaries were normal. The ultrasound report was quite suggestive of posterior wall multiple fibroids.

The patient was thus prepared for hysterectomy. Perioperatively, the fibroids arising from the posterior wall were densely adhered in pouch of Douglas and loosely adhered to the rectum. The uterine shape and axis was highly distorted. There were six fibroids, firm in consistency arising from whole of the posterior wall of the body and the cervical region of the uterus. Total abdominal hysterectomy was done after adhesiolysis as shown in Figure 6. Postoperatively, the patient was afebrile and well. Postoperative Hb was 10.2 g/dL as compared to 11 g/dL preoperative Hb. The patient was discharged on 5th postoperative day in a satisfactory condition.

DISCUSSION

Fibroids are the most common uterine tumors usually seen in reproductive age group females. Incidence of myomas is as high as 50%.¹ Mostly small fibroids are asymptomatic but some of them may present with variety of symptoms. Menstrual symptoms are most common. The patient may have dysmenorrhea, menorrhagia, polymenorrhea, infertility, and lower abdominal pain.²

Pain may range from dull aching type pain to colicky severe pain. Such pain may be increased during menses. Uncommonly, fibroids may undergo degeneration like cystic, hyaline, or red degeneration. These degenerative changes may manifest as severe pain due to a compromised blood flow. As in Case 1, the patient had severe pain in abdomen, acute in onset and associated with fever. Ultrasound was although slightly misleading as it was suggestive of an ovarian cyst with fibroid uterus. Perioperatively, it looked like a degenerating fibroid. Histopathology was however

suggestive of a rare diagnosis of a cotyledenoid dissecting fibroid, which is also known as Sternberg tumor.³ This tumor occurs in patients of age ranging from 23 to 65 years. These tumors give an impression of malignancy but they are uniformly benign. These myomas originate close to the serosal surface and exhibit a dissecting growth into the myometrium in the form of sinuous processes producing micronodules of swirled neoplastic smooth muscle cells within the myometrium. There is a perinodular hydropic degeneration.⁴ This hydropic stroma is highly vascularized and may even mimic a malignancy or a hemangioma due to its reddish brown color.

Sometimes fibroids may present as compression symptoms like retention of urine, increased urinary frequency, incontinence of urine, and constipation. As in Case 2, the patient had atypical symptoms of flank pain and chronic constipation. Although ultrasound suggested a left ovarian mass but intraoperatively it was evident that the symptoms were due to large and multiple broad ligament fibroids. The incidence of broad ligament fibroids is less than one.^{1,5} These myomas tend to grow to enormous sizes and cause pressure symptoms. Diagnosis of the broad ligament is always challenging. Transvaginal ultrasound, CT, and MRI are helpful.⁵ Usually they are confused to be an ovarian mass. Surgical management of broad ligament fibroids is also challenging and may be associated with complications like hemorrhage and ureteric injuries.

As in Case 3, posterior wall and cervical fibroids may sometimes be impacted in pouch of Douglas. Symptoms like deep dyspareunia, pressure symptoms, and rectal tenesmus may be present.^{6,7} These fibroids may pose a diagnostic challenge and may be confused with ovarian masses and other masses of pouch of Douglas like endometriosis, dermoids, mesothelioma, gastrointestinal tumors, and inflammatory masses. Surgical management of these fibroids is also challenging and care should be taken to avoid bowel and ureteric injuries.

Other atypical symptoms may be a protruding vaginal mass with uterine inversion found in cases of submucosal large polypoidal fibroids. Rarely, large subserosal fibroids may irritate the vagus or phrenic nerve causing hiccups to the patient. Pruritus

with multiple raised skin lesions on the limbs is unusual and is the only symptom of piloleiomyoma. Uterine myoma may coexist with piloleiomyoma.⁷

CONCLUSION

Thus knowledge of these typical and atypical symptoms aids in early diagnosis of these rare fibroids and helps in appropriate counseling of patients. Diagnostic modalities like CT/MRI are helpful in cases where diagnosis is difficult.⁸ There is potential for compromise of adjacent organ function and higher rate of surgical complications if the fibroid continues to enlarge. Early diagnosis helps in preserving fertility when uterus is smaller by myomectomy.

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