

A case report on an unusual degeneration of uterine leiomyoma: Myxoid degeneration

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Abstract

Background: Leiomyomas are benign smooth muscle neoplasm that typically occurs from the myometrium. Most of the women with uterine leiomyoma remain asymptomatic. Various degeneration including hyaline, cystic, myxoid and red degeneration and dystrophic calcification occur in leiomyoma, among them myxoid degeneration occurs rarely. Here is a case report of 40 years with one living child and two abortions who came with complaints of feeling of heaviness and pain at lower abdomen for six months, palpable lower abdominal mass for four months and difficulty in passing urine since 15 days. Multiple fibroids with cystic degeneration were suspected in Computed Tomography scan report. The patient underwent Total Abdominal Hysterectomy with Bilateral Salpingectomy. On cut section there was a cystic area on the body of uterus containing 1.1 liter of straw coloured fluid. Final histopathological findings concluded multiple leiomyoma with myxoid degeneration.

Key words: Degeneration; Leiomyoma; Myxoid.

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INTRODUCTION

Leiomyoma also known as fibroid is the most common benign tumor of uterus. Twenty percent of the women at the age of 30 have got leiomyoma in their womb but most of them remain asymptomatic¹. As leiomyomas enlarge, they may outgrow their blood supply, which results in various types of degeneration including hyaline, cystic, myxoid and red degeneration and dystrophic calcification².

Generally, the sonographic appearance of uterine leiomyomas is characteristic however, they can undergo various kinds of degeneration that can dramatically change their sonographic appearance and make the diagnosis quite challenging³. Myxoid degeneration is a rare change accounting for 19% of the cases and its clinical diagnosis is difficult as there is no relationship between symptomatology and the presence of these changes⁴.

Although fibroids typically have a characteristic ultrasonography appearance, degenerating fibroids can have variable patterns, can pose diagnostic challenges and sometimes the confusion is so much that the clear picture is revealed only at laparotomy or after histopathological report⁵.

CASE REPORT

A 40 year old lady, one living child with two abortions (P1L1A2), came to the Department of Obstetrics and Gynecology, Kathmandu Medical College with complaints of pain at lower abdomen for four months which was gradual in onset, dull aching, located at subumbilical region, non-radiating and non-migratory type, aggravated while bending down and relieved on lying down with a sense of heaviness in the lower abdomen. She also gave history of mass felt per abdomen which had suddenly increased in its size for 15 days since then she had developed difficulty while passing urine with sense of incomplete evacuation with each voiding. However there was no history of difficulty in passing stool, fever, loss of appetite and weight loss. Her menstrual cycle was regular and normal. There was no past history of hormonal therapy and malignancy. There was no history of malignancy in family members as well.

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On clinical examination she was well built without pallor, edema and lymphadenopathy. Abdominal examination revealed a uniform smooth surface with regular margin and non-tender mass of 22 weeks uterine size, appeared to be arising from pelvis. Lower pole of the mass could not be reached. On per speculum examination, cervix was healthy. On per vaginal examination, enlarged uterus of 22 weeks size, mobile, non-tender and firm. Bilateral fornices were full but non-tender. Per rectal examination revealed no mass in the rectum.

On investigations hemoglobin level was 13.8gm%, total and differential blood counts, platelets counts, Renal function test, blood sugar level all were within normal limits. Cancer Antigen 125 (CA125) was 193.2 U/ml and Carcinoembryonic Antigen (CEA) was 2.1ng/ml.

Trans-abdominal sonography revealed bulky uterus of 11.5X 6.5 X 6.1 cm³ size with hypoechoic lesion measuring 3.7X3.4 cm² at lower body of the uterus.

The computed tomography of abdomen and pelvis showed bulky uterus of 19X16X15 cm³ with multiple enhancing lesions seen in the wall of uterus largest one measuring 15X13X10cm³ with central non-enhancing areas within. No calcification and fat component seen and reported as multiple fibroids with cystic degeneration.

She was planned for abdominal hysterectomy. Vertical midline incision was given and abdomen was opened. Total Abdominal Hysterectomy (TAH) with bilateral salpingectomy was done.

Per operative findings revealed grossly enlarged uterus weighing 2.2 kilograms with irregular surface, largest bulge at left fundus superior aspect measuring 8X8X7 cm³ with small subserosal fibroid of 2X2X1cm³ at the anterior wall of uterus. Bilateral tubes were stretched up and ovaries were normal. On cut section, utero cervical length was 14 cm and empty. Cavity of 8X8X7cm³ containing 1.1 liter of straw coloured fluid with fleshy floor was found.

Four intramural fibroids, at right fundus superior aspect of uterus with whorled appearances, largest measuring 4X4X2cm³.

Histopathology report showed multiple leiomyoma with myxoid degeneration.

Her post-operative period was uneventful and she had been discharged on fifth post-operative day.

DISCUSSION

Uterine fibroids, also known as myomas or leiomyomas, are the commonest of all pelvic tumors of women in the reproductive age group and increasing with age⁶. Various degenerations can be seen in leiomyomas and among them hyaline being the most common accounting 63%⁴.

Myxoid leiomyomas are the degenerated leiomyoma composed primarily of smooth muscle cells, with significant accumulation of a cellular material rich in acid mucins⁷. Broad ligament fibroid with myxoid degeneration can mimic the ovarian tumor and its clinical diagnosis is difficult. One case had been reported by R. R. Godbole et al. and concluded that broad ligament fibroid with myxoid degeneration with inconclusive diagnostic report can have high suspicion of ovarian malignancy and final diagnosis always remains histopathological⁶.

M Chaouki et al. also concluded that myxoid leiomyoma of the uterus is a rare benign tumor and it's diagnosis remains histopathological and leiomyosarcoma should always be ruled out⁷.

CONCLUSION

Myxoid degeneration of leiomyoma is a rare condition and it is difficult to diagnose clinically. Sometimes it mimics the picture of cystic degeneration of uterine leiomyoma and ovarian tumor. In such cases the final diagnosis can be reached only after histopathological reports.

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