

Myxoid Degeneration in Leiomyomas - A Confusing Entity

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Abstract

The most common benign uterine tumour is Leiomyoma. It usually present as a solid firm and rubbery tumour. Rare presentations are cystic and myxoid degenerations seen in giant tumours. Here is a case report of a large leiomyoma arising from posterior wall of uterus. The patient reported to hospital with bloating of abdomen and incomplete evacuation of bladder. Ultrasound showed a thickened endometrium of 12 mm along with the lesion - hence a hysteroscopy and biopsy was scheduled. Biopsy showed secretory changes with no malignancy. Abdominal total hysterectomy with bilateral salpingo-oophorectomy was done after ureteric stenting. The mass weighing 1.4 kg was wedged in the pelvis. Histopathological report-Uterine Leiomyoma with myxoid degeneration. Myxoid degeneration is a rare type of degeneration in fibroids, only diagnosed on histopathology. Frozen Section ruled out malignancy. Pressure symptoms like hydro ureter and mild hydronephrosis was due to the tumour pressing on left side as it was wedged the pelvis.

Keywords: Leiomyoma; Myxoid; Uterus

Introduction

Myxoid degeneration of Leiomyoma is a benign smooth muscle tumour of the uterus with extensive myxoid changes. It is non-malignant. Here we report a case of myxoid degeneration in a leiomyoma in a 49-year-old woman. The clinical, MRI findings, operative and histological findings are further highlighted in this case report.

Case Report

A 49-year-old G₃P₂A₁ L2 (1LSCS/IND) presented to us with complaints of bloating of abdomen, incomplete evacuation of bladder and frequency of urination from 2 ½ month. She had amenorrhoea of 9 months. No change in bowel habits. No H/O weight loss. Last child birth was 18 years back.

On Examination there was a mass extending from pelvis to the sub-umbilical region lower pole could not be reached. Per speculum examination showed cervix was normal but pulled high up. Vaginal examination revealed the mass inseparable from the uterus. Systemic examination did not reveal any abnormalities. Chest- X Ray was normal. All Laboratory investigations were normal. Kidney function tests were normal. Differential diagnosis of complex ovarian cyst was kept in mind. Tumour markers including CEA, CA-19.9, CA 125 AFP and Beta HCG were negative. LDH was normal.

USG - enlarged uterus, intramural fibroid in anterior wall, a well-defined mass lesion posterior to uterus with solid and cystic component in pelvis-seen posterior to uterus. Lt. ovary not separately visualised. Endometrial thickness 12mm Lt. Kidney- mild hydronephrosis and hydroureter. Rt. Kidney - slightly smaller in size - no other abnormality detected.

MRI done - A Large lobulated mass measuring 13 cm x 9 cm x 10 cm is seen in the pelvis and this seems to be arising from the posterior wall of the uterus and is exophytic from the uterine surface. The mass is seen abutting the posterior and upper part of the endometrial cavity which appears mildly distorted. Another rounded intramural mass measuring approx. 4.7cm in diameter is seen in the anterior upper right sector of the uterus.

Patient underwent exploratory laparotomy. A large mass originating from uterus 10" x 10" in diameter- extending from posterior aspect of uterus to fundal region, compressing the sigmoid, rectum and bladder and deeply wedged in pelvis. Patient underwent total abdominal hysterectomy with bilateral salpingo-oophorectomy.

Gross examination showed a tumour arising from uterus weighing 1.4 kg. Cut section showed multiple cysts with solid areas and multiple cystic areas. Frozen section - no atypia.

Final report - Leiomyoma shows cystic areas with myxoid degeneration.



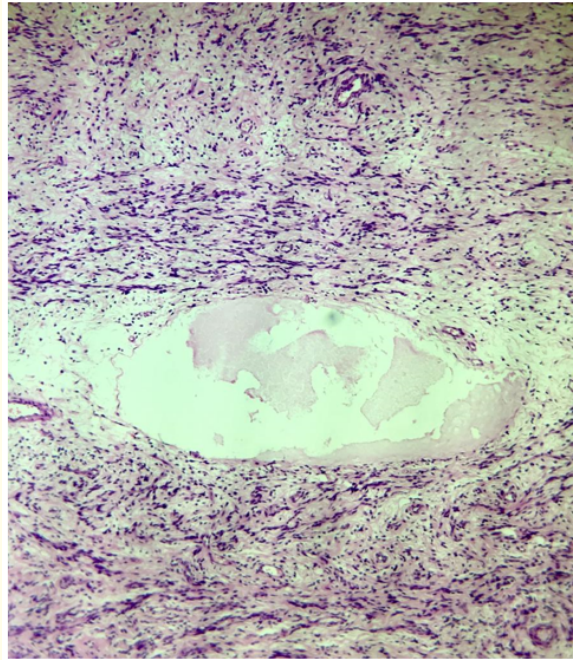


Figure 1: 10X HE Leiomyoma showing cystic areas surrounded by stroma showing myxoid degeneration.

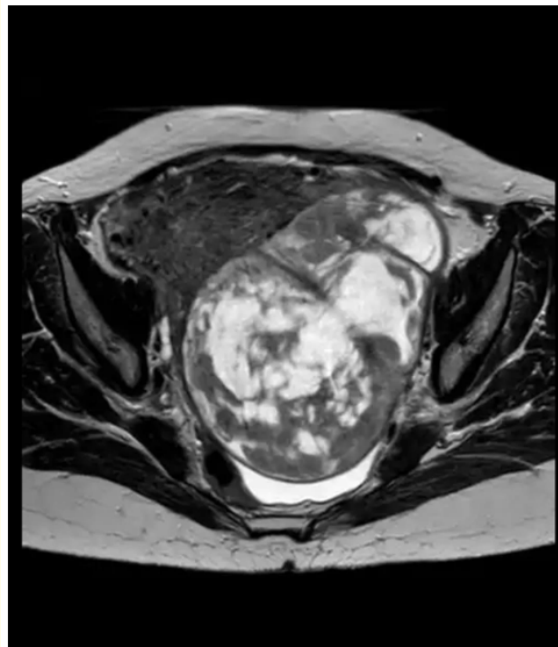


Figure 2: Contrast enhanced MRI of the same tumour.

Discussion

Myxoid changes in benign smooth muscle tumour must be distinguished from Leiomyosarcoma. Generally, Leiomyomas show hyaline, red degeneration, calcification, cystic degeneration and rarely myxoid degeneration. Hyaline degeneration is seen in 60% cases. No relationship has been identified between the clinical symptoms and incidence of degenerative changes [1-9]. Myxoid Leiomyomas are histologically a sub type composed mainly of smooth muscle cells with significant accumulation of a cellular material rich in acid mucins.

Conclusion

Myxoid degeneration in a uterine leiomyoma is a rare entity. This type of degeneration can be confused with ovarian malignancy during pre-operative diagnosis.

In intra-operative period cut section can mimic leiomyosarcoma which should always be excluded. In a nutshell myxoid degeneration is a histopathological diagnosis.

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Bibliography

1. Omar AlShalabi, *et al.* "Pelvic Myxoid Leiomyoma Mass between Vagina and Rectum". *Case Report in Surgery* (2016): 3479132.
2. P Bansal and D Garg. "A case of massive broad ligament leiomyoma imitating an ovarian tumour". *Journal of Clinical and Diagnostic Research* 8.3 (2014): 136-137.
3. Ahmed Samy el-Agwany. "Myxoid degeneration in a huge uterine leiomyoma: an unusual benign pathology mimicking malignancy". *Archives of Perinatal Medicine* 20.2 (2014): 118.
4. M Radojkovic, *et al.* "Giant primary retroperitoneal myxoid: a case report". *Vojnosanitetski Pregled* 70.5 (2013): 522-525.
5. Mbarki Chaouki, *et al.* "An unusual presentation of uterine leiomyoma: Myxoid leiomyoma". *International Journal of Case Reports and Images* 3.3 (2012): 1-3.
6. Kurman RJ. "Blaustein's pathology of the female genital tract". 4th edition, Springer-Verlag, Berlin, Cancer Genetics and Cytogenetics 77 (1994): 65-68.
7. Clement PB, *et al.* "Diffuse, perinodular, and other patterns of hydropic degeneration within and adjacent to uterine leiomyomas. Problems in differential diagnosis". *American Journal of Surgical Pathology* 16.1 (1992): 26-2.
8. Karasick S, *et al.* "Imaging of uterine leiomyomas". *American Journal of Roentgenology* 158.4 (1992): 799-805.
9. Yuel VL and Kaur V. "Broad ligament fibroids: An unusual presentation". *JK Science* 8 (2006): 217-218.

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