



ORIGINAL RESEARCH PAPER

Medical Science

**CHONDROID AREAS-? METAPLASIA,
?DIFFERENTIATION**

KEY WORDS:

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INTRODUCTION

Leiomyoma is the most common benign lesion in the myometrium .They are asymptomatic in 50% of the cases. According to location leiomyoma's are classified into intramural (70%) , subserosal(20%) and submucosal(10%). There may be some variation in morphology such as calcification ,hyalinisation, red degeneration and infarction. Grey - opalescent¹ However metaplasia is rare and may be epithelial which is more common and stromal which is rare. Although rare leiomyoma may contain heterogenous elements such as fat(m/c) , skeletal muscle , chondroid and osseous tissue.Pure cartilaginous metaplasia is very rare.²

Here we are presenting a case which shows cartilaginous metaplasia.

CASE REPORT-

A 46 year old multiparous female , with obstetric score of gravida2,Para-2, live birth -2, abortion-0 presented with generalised weakness since 3 weeks and dysmenorrhea with occasional passage of clots since 2 years. D&C was done 1 year back in view of thickened endometrium. The lady had pallor(++) other than that her physical examination was normal. Her menstrual cycles were regular ,3 days/30 days , moderate flow with history of passage of clots and dysmenorrhea. History of usage of copper T, 19 years back for 1 year and tubectomy was done 11 years back . USG of abdomen and pelvis showed bulky uterus with well defined hyper echoic lesion in the posterior myometrial wall and indented endometrium, mild internal vascularity , tiny cystic area measuring 6mm within the lesion. Hysterectomy was performed and specimen sent for histopathology. Grossly the uterus with cervix measured 10x7x3.5 cms. External surface of uterus was enlarged and bulky . Cut surface of uterus showed a large intramural fibroid measuring 6.5x5x4.5cms which pushed the endometrial cavity to one side. Cut surface showed fibroid which had grey white to grey yellow areas with whorled appearance and myxoid changes. (Figures)

DISCUSSION

Leiomyoma is a benign smooth muscle neoplasm known to occur in any organ but most commonly seen in Uterus, small bowel and oesophagus . It is dependent on estrogen for its growth. It is seen predominantly in reproductive age group . Its growth may be stimulated by pregnancy or hormonal therapy . Heterotopia in the occurrence of a mature tissue in an abnormal location. Cartilaginous metaplasia of leiomyoma in rare. It is seen in leiomyoma of soft tissue but rarely in myometrium.

WHO classification of endometrial metaplasia

- [1] Epithelial metaplasia and related changes.
- [2] Non epithelial metaplasia and related changes.

- Smooth muscle metaplasia
- Osseous metaplasia
- Cartilogenous metaplasia
- Fatty change
- Foam cell change.

Yamadiri et al² reported a case of leiomyoma with cartilage nous differentiation which was seen with differentiati on as a hard nodule in leiomyoma Adipose metaplasia is most commonly reported. Cause for cartilaginous and fat metaplasia is not known and it is postulated that it is a result of reprogramming of Stem cells that are known to exist in normal tissue or if undifferentiated mesenchymal cells in the connective tissue.⁴

Chronic infections like genital TB, endometritis, pyometra are other causes for metaplasia. In India genital TB is common as it can cause chondrogenesis.³ Our case showed cartilaginous metaplasia occupying 30% of tumor area without any granulomas.

CONCLUSION

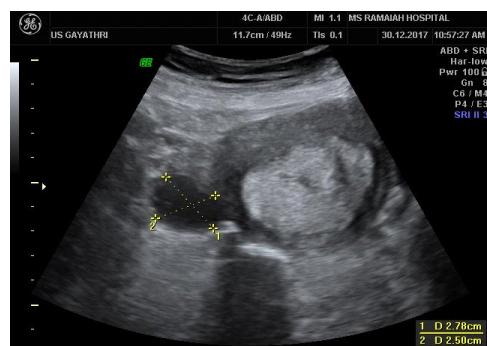
Endometrial stromal (cartilaginous) metaplasia are frequently over looked and misdiagnosed. Leiomyoma's may have unusual presentations mimicking other soft tissue tumours . Grey - opalescentHence careful clinical and histopathological examination will prevent misinterp retation of non tumour cartilaginous foci as component of malignant neoplasm.

Adipose metaplasia is most commonly reported. Cause for cartilaginous metaplasia is not known and it is postulated by some that it is a result of reprogramming of Stem cells that are known to exist in normal tissue or if undifferentiated mesenchymal cells in the connective tissue.In a metaplastic change these precursor cells differ entiate along a new pathway unlike dysplasia these metaplastic changes have no malignant potential. Our case showed cartilaginous metaplasia occupying 30% of tumour area .

CONCLUSION

Endometrial stromal (cartilaginous) metaplasia are frequently over looked and misdiagnosed. Leiomyoma's may have unusual presentations mimicking other soft tissue tumours. Hence careful clinical and histopathological examination will prevent misinterp retation of non tumour cartilaginous foci as component of malignant neoplasm.

Finding -No finding sources
Confide of interest - None declared
Ethical approval - Not required.





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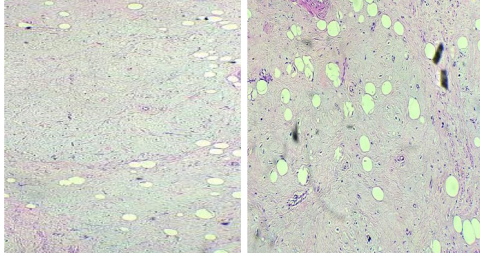


Figure 4- Photomicrograph showing cartilagenous and fat metaplasia

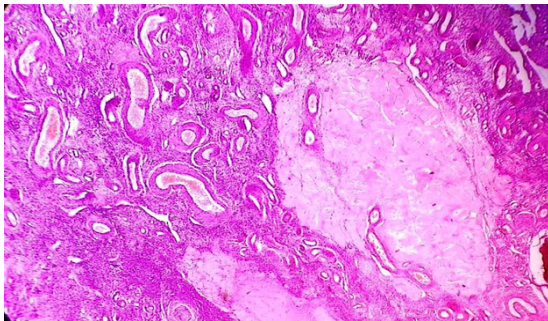


Figure 2- photomicrograph showing endometrial glands with cartilagenous areas

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