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Adenomyosis in a Young Nullipara: A Rare Case Report.

Revathi Shree R, Ishwarya, S Hemanathan, and G Manimaran D.

Department of Pathology, Shri Satya Sai Medical College and Research Institute, India.

ABSTRACT

Occurence of Adenomyosis alone is rare in the age group of less than third decade [1,10] . It is one of the cause for abnormal uterine bleeding. Here ,we report a case of adenomyosis in a 25 year old female with an unusual clinical presentation of primary infertility. Per abdomen examination revealed uterus corresponding to 20 weeks size. Ultrasound examination showed bulky uterus with single Intramural fibroid measuring 8.5 x 6.8 cm. A provisional diagnosis of leiomyoma was suggested for which she underwent myomectomy. On gross examination,we received multiple greywhite and greybrown softtissues , of which largest was measuring 6 x 4 cm,with trabeculations. Histopathological examination confirmed the mass as adenomyosis. We report this case for its unusual clinical presentation as primary infertility.

Keywords: Nulliparous, 2nd decade, Primary infertility, Adenomyosis.

Corresponding author

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INTRODUCTION

Adenomyosis is commonly seen in fourth to fifth decade, presenting as abnormal uterine bleeding [1,3]. These cases will have history of more than two deliveries [9]. It is said to be a benign uterine disease, characterized by the presence of normal appearing endometrial glands and stroma ,one or more low power fields away from the endometrial myometrial junction [2] . Main clinical features are dysmennorhea and menorrhagia. Treatment includes both medical and surgical management.

CASE REPORT

25 year old female presented with complaints of anxious to conceive.She was married since 2 years, non consanginous marriage .On Per abdomen examination, uterus corresponded to 20 weeks size. Complete blood count, Thyroid function Test were within normal limits. Ultrasound examination showed bulky uterus with a single Intramural fibroid measuring 8.5 x 6.8 cm . Features were that of leiomyoma. Semen analysis of the partner was within normal limits.

She underwent myomectomy.

On gross examination, multiple greywhite and greybrown softtissues ,of which largest was measuring 6 x 4 cm, firm with trabeculations. No whorling seen. No areas of haemorrhage,cystic degeneration [Figure 1].

Low power view – 10 X -Histopathological examination showed endometrial glands and stroma penetrating myometrium [Figure 2,3] .

High power view – 40X - Endometrial glands were lined by columnar epithelium with surrounding endometrial stroma [Figure 4].

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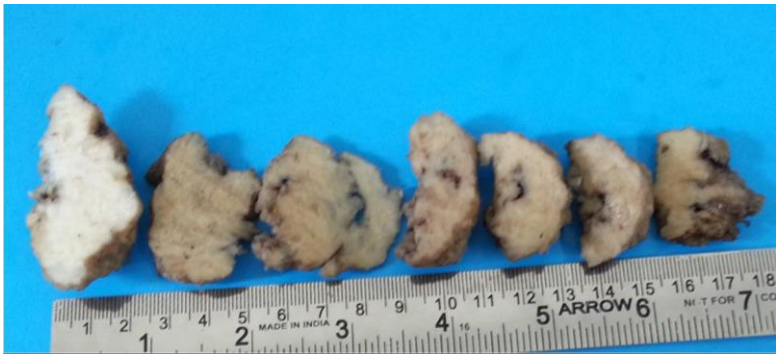
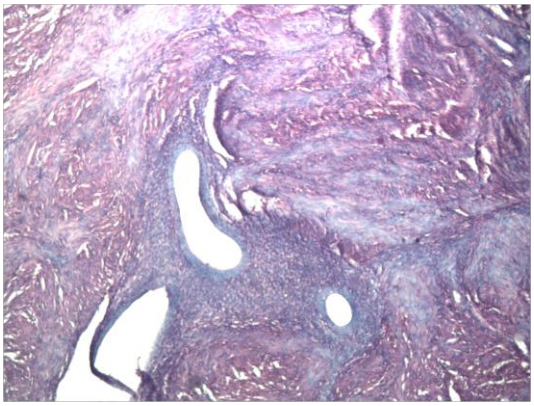


Low power view – 10 X -Histopathological examination showed endometrial glands and stroma penetrating myometrium [Figure 2] .



Diagnosis of Adenomyosis was made

Post operative period was uneventful. We report this case for its unusual clinical presentation.

DISCUSSION

Adenomyosis is commonly seen in multiparous women in fourth to fifth decade. Due to lack of submucosa in the uterus, every pregnancy increases the chances of penetration of endometrial glands and stroma into myometrium [9]. In a study by D.De. Ziegler et al, it was proven that there is an association between endometriosis and infertility [4]. Few case studies are there regarding the association of adenomyosis with infertility [5,6].

Grossly it is grey white, firm with trabeculations. Adenomyosis cannot be shelled out easily unlike leiomyoma.

Clinical presentation depends on the depth of penetration of endometrial glands into myometrium and number of endometrial glands per low power field.

According to Molitor's criteria [7], Grading was done based on the depth of penetration

Gr I: Penetration of EM into the inner third of the MM
Gr II: Penetration of EM into the middle third of MM.
Gr III: Penetration of EM into the outer third of MM.

Dysmennorhea was mainly seen in Grade II or III penetration

According to Bird et al [2], clinical features was proportional to the number of ectopic glands per low power field.

Mild-1 to 3 glands/L.P.F.
Moderate- 4 to 9 glands/L.P.F.
Severe-10 or more glands/L.P.F.

Menorrhagia was proportional to the degree of involvement, which is due to dysfunctional contractility of the myometrium during menstruation [11], whereas

dysfunctional uterine bleeding is associated with minimally invasive adenomyosis .
For the diagnosis of adenomyosis, various non-invasive imaging modalities are used .
Hysterosalpingography (HSG) – shows multiple small spicules extending from the endometrium into the myometrium with saccular endings.

HSG is no longer used to diagnose adenomyosis due to its low sensitivity and specificity . However, it is used for routine diagnostic work-up in many fertility clinics.

Trans vaginal ultrasound is found to be superior to transabdominal ultrasound in the diagnosis of adenomyosis [8].

Ultrasonogram shows echotexture heterogeneity in the myometrium which correlates with heterotopic endometrial tissue within myometrium.

MRI shows junctional zone thickness is greater than 12 mm. T 2 weighed MRI shows bright foci in areas of abnormal low signal intensity within the myometrium [10] . MRI is found to be highly sensitive and specific in the accurate diagnosis of adenomyosis.

Microscopy shows the presence of normal appearing endometrial glands and stroma, low power fields away from the endometrial myometrial junction.

Treatments options includes Hormone treatments like birth control pills, progestins or GnRH-analogs or endometrial ablation or hysterectomy or Uterine artery embolization.

Adenomyosis cannot be shelled out easily , so the only way to remove it completely is hysterectomy.

CONCLUSION

Adenomyosis is common in multiparous women in the age group of fourth to fifth decade. We report this case for its unusual clinical presentation, and to create awareness that infertility in young female can be due to adenomyosis and should be thought of in differential diagnosis.

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