



## Laparoscopic Excision Of Cystic Adenomyosis-A Case Report

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### Abstract

Cystic adenomyosis is a special and a rare type of adenomyosis .It usually affects women aged <30 years. The characterising symptoms are severe and worsening dysmenorrhea associated with menorrhagia and chronic pelvic pain. This is a case of A 31 year old female who presented to the OPD with complaints of chronic pelvic pain since 2 years, associated with severe and worsening dysmenorrhea since 1 year, which was refractory to hormonal suppression and common analgesics. MRI formed the mainstay of the diagnosis. The feasibility of laparoscopic excision of the cystic lesion along with reconstruction of the uterus was done in this case. Histopathologically , the diagnosis of cystic adenomyosis was confirmed.

**Keywords:** adenomyosis, laparoscopy, dysmenorrhea

### Introduction

Adenomyosis is the presence of endometrial glands and stroma in myometrium, with adjacent smooth muscle hyperplasia. It may be diffuse or cystic.(1) Cystic adenomyosis, which is a cystic lesion in the myometrium, is a rare disease characterized by severe dysmenorrhea and chronic recurrent pelvic pain. The patient with cystic adenomyoma presents with non-specific symptoms such as abnormal uterine bleeding, chronic pelvic pain and severe dysmenorrhea, which are often resistant to analgesics or cyclical oral contraceptives.(2)

Evidence from several case reports suggests that surgical removal of the cyst is the best treatment option to relieve the patient's symptoms. The feasibility of laparoscopic excision of the lesion along with uterine reconstruction is presented in this

case. It is an efficacious and viable method of treatment in young patients who wish to retain fertility.

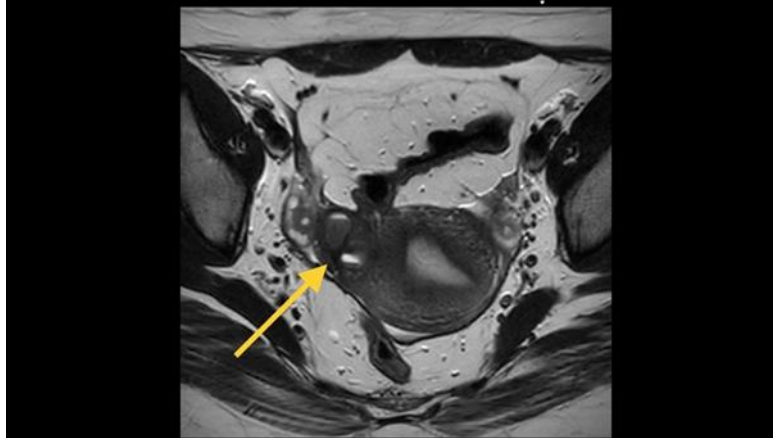
Herein, we report our experience with a case of cystic adenomyosis that was treated laparoscopically in a 31 year old woman.

### Case Report

The case was of a 31 year old nulligravida female who had consulted at our OPD with c/o severe dysmenorrhea since 3 years, which was aggravated since last 6 months, not responding to hormonal suppression and analgesics. Also, she had complaints of chronic pelvic pain, radiating to the right lower abdomen and buttock since 3 years. She had history of irregular menstrual cycles since 6 months.

CA-125 level was 18.8 (within normal range).

**FIGURE 1-T2 weighted image with the arrow pointing towards cystic Adenomyoma**



MRI reports showed well defined cystic lesions noted in the right lateral border of the uterus with T2 dependent fluid-fluid layering within (hemorrhagic component)-suggestive of cystic adenomyoma.

Laparoscopic surgery was preferred for this case. At laparoscopy, the uterine lesion was seen over the right portion of the uterine fundus. Also, we found that the rectum was adherent to the lateral pelvic side wall and posterior surface of the uterus, rectum dissected from the posterior surface of the uterus.

Endometriosis noted over the right pelvic wall. Ureterolysis started from the pelvic brim. Lateralisation of ureters done and Okabayashi

Pararectal space entered. Rectum separated from the posterior wall of uterus and POD entered by sharp dissection. Diluted Vasopressin (1:100) injected over lesion and an incision using ultrasonic scalpel is made to divide the mass into two. Dark chocolate brown fluid flowed from the cyst and a cystic cavity with brown tissue was seen. The adenomyotic tissues were excised from the surrounding myometrium, endometrial cavity was not breached, ureteric dissection carried out further as it was adherent to adenomyoma which was extending into the broad ligament and the surgical site was closed with two-layer continuous sutures using V-lock 2-0.

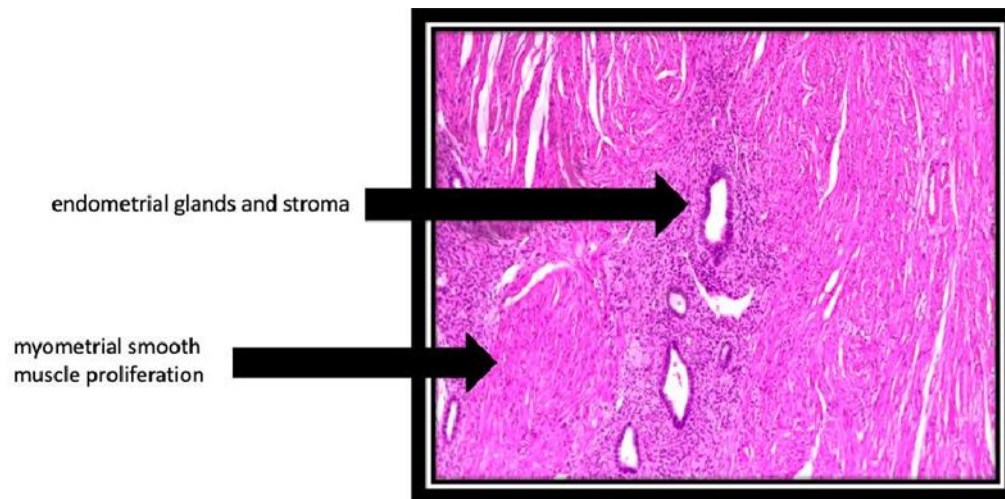
**FIGURE 2- Intra-op picture showing excision of the Adenomyoma using Bipolar and Harmonic**



**FIGURE 3- Gross picture of the adenomyotic specimen**



**FIGURE 4-HPE showing endometrial glands within the myometrium**



The histopathology report showed the cyst wall to be lined by endometrial glands which confirmed the diagnosis. Endometrial glands and stroma seen deep into the myometrium.

Postoperatively, the patient had a smooth recovery.

Her symptoms were completely resolved on follow up after 3 months, and ultrasound examination was normal. Her symptoms of dyschezia and dysmenorrhea improved significantly.

#### **Discussion-**

Cystic adenomyoma is a rare disease resulting from hemorrhage within ectopic glands in the myometrium.

It is characterized by well-circumscribed endometrial glands and stroma located within the myometrium.(2)

It is generally asymptomatic in the early stages and can cause dysmenorrhea and chronic pelvic pain as the disease progresses. At adolescence, patients may suffer severe primary dysmenorrhea. Very large cystic adenomyomas can rupture spontaneously.

Depending upon the age of onset, it is classified as either adult or juvenile type. The most characteristic feature in adolescents is the progressive aggravation of primary dysmenorrhea, which suggests that the disease is congenital. It occurs as a result of Mullerian tube damage or double folding during the development of the residual cystic cavity or residual epithelium after fusion with the contralateral Mullerian tube.(2) After menarche, functional bleeding from the lining of the cystic cavity or epithelium in response to estrogen increases cystic

cavity pressure and early progressive dysmenorrhea occurs.(3)

Ultrasound is the first choice for the diagnosis of adenomyosis, but MRI is the gold standard for the diagnosis. Ultrasound suggests the presence of mixed masses and dark areas of cystic fluid. However, MRI cannot only determine the size and location of the lesion, but can also be used to examine the characteristic signals in different weighted images. This feature can be used to distinguish this condition from the liquefaction of uterine fibroids.

The specificity and sensitivity of serum CA-125 level in the diagnosis of cystic uterine adenomyosis are low, but an increased CA-125 level is helpful in the differential diagnosis of the disease from endometrial polyps and uterine myoma degeneration. (5) Usually, CA-125 levels are slightly elevated in cases of cystic adenomyosis. However, in the present case, the levels of serum CA-125 were found to be in the normal range.

Since many patients with cystic adenomyosis are young, a minimally invasive procedure, such as laparoscopic excision is considered preferable. Laparoscopic excision can significantly improve the associated dysmenorrhea and increase the likelihood of successful pregnancy(4).

### Conclusion-

Cystic Adenomyosis is easy for clinicians to misdiagnose, and its diagnosis can be missed because of its low incidence and rare clinical and atypical clinical features. It can be asymptomatic or show progressive dysmenorrhea.

Laparoscopic surgery is an effective method for the diagnosis and treatment of large cystic masses in the uterine myometrium. In our case, cyst adenomyoma was difficult to determine before surgery. Therefore, when cystic lesions are identified with severe dysmenorrhea, the connection with uterus and the presence of cystic adenomyoma should be considered and distinguished from cystic degeneration of leiomyoma.

**Ethics Approval**-The case report has been reviewed and approved by the Institutional Ethics Committee (IEC).

(Approval Number -DHR-EC/2022/07/30)

**Financial Disclosure**-This case report was completed without any external source funding.

**Informed Consent**-Written and informed consent was taken from the subject.

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