

Unmasking Fibroids: A Case Study on its Impact and Resolution through Hysterectomy

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ABSTRACT

Intrauterine leiomyomas or fibroids are benign tumors of the uterus. It affects millions of women around the world of reproductive age. This case study discusses the journey of a 46-year-old woman who endured fibroids for over a decade. She experienced chronic pain, menorrhagia, and irregular menstrual cycles. The patient was initially advised against hysterectomy and was managed with hormonal therapies and a laparoscopic myomectomy. However, her symptoms persisted and worsened, leading to significant anemia and a decreased quality of life. After multiple unsuccessful treatments, the patient ultimately opted for a total laparoscopic hysterectomy, which provided definitive relief. This report underscores the need for greater awareness and timely intervention in managing fibroids, highlighting hysterectomy as a potentially curative option when conservative treatments fail. The case emphasizes the importance of personalized care in improving outcomes for women affected by this common yet debilitating condition.

Keywords: intrauterine leiomyoma, fibroids, hysterectomy

INTRODUCTION

Intrauterine leiomyoma, more commonly known as fibroids are benign neoplasms within the uterus affecting women of reproductive age. They are largely caused by hormones, namely, estrogen and progesterone. This is a condition affecting millions of women worldwide but the research on the topic is relatively limited. It is a cause of physical and mental struggle that can persist for years and is a health concern for many women. This paper presents the case of a woman who suffered from fibroids from her late 20s up until her mid-40s who had completed her reproductive planning. The condition was cured by hysterectomy. Hysterectomy is the complete removal of the uterus and is the most definitive treatment for fibroids. It is recommended when other treatment options have proven ineffective. There are three

types of hysterectomy: abdominal, laparoscopic and vaginal. [5]

This paper focuses on highlighting the daily struggles that women face due to the limited awareness of fibroids. In this case, the patient's doctors advised against hysterectomy for over a decade which could've rid her of the chronic pain, menorrhagia, and irregular menstrual cycles she struggled with during that time period. The study examines the effectiveness and potential side effects of hysterectomy, to understand if it is the better treatment option for large fibroids. Through this analysis, the paper seeks to underscore the importance of improving the quality of life for women affected by this condition.

CASE PRESENTATION

This case is of a 46-year-old female presented with abnormal uterine bleeding

(AUB). There was heavy menstrual bleeding, that was prolonged and irregular for over two years, cycles occurring every 2-3 months. Clinical examination revealed adenomyosis and fibroids with a uterine size corresponding to 14-18 weeks of gestation (14.0 x 8.0 x 9.0 cm). The patient's general condition was fair, and afebrile, with a blood pressure of 110/80 mmHg and a pulse rate of 74 bpm. The abdomen was soft on examination, and there were grade 1 fatty changes in the liver. The uterus was enlarged. Ovaries and tubes were healthy and normal.

CASE HISTORY

The patient had previously undergone two cesarean sections and cholecystectomy, before the age of 30. She had completed her reproductive planning. 3-4 years after the cholecystectomy, the patient started experiencing irregular menstrual cycle and menorrhagia. Scanning showed small fibroids. The patient was put under hormonal medication.

Shortly after, the condition had worsened characterized by heavy bleeding, pain and blood clots. Doctor advised against hysterectomy due to her young age. A laparoscopic myomectomy was done. Postoperatively, she was diagnosed with adenomyosis and informed that her abdomen would exhibit distension akin to that of a 3-month pregnant woman. Fig.1 shows the myomectomy procedure.

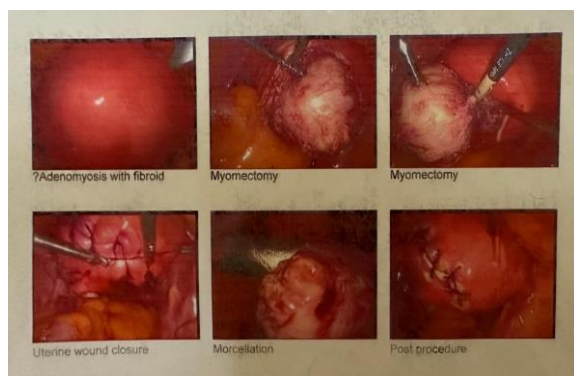


Fig. 1

3-4 years later, there was a recurrence of menorrhagia and severe pain due to growth

of fibroids. Since the progression was slow, there was minimal intervention. The situation had deteriorated in 2020 during the COVID-19 pandemic but surgical intervention was again deferred by the doctors. The patient was managed with tranexamic acid injections and progesterone tablets. Laboratory results revealed significant anaemia, with an iron level of 4 and a haemoglobin count of 7, necessitating iron infusions. However, after the second infusion, she developed allergic reactions.

The patient then resorted to yoga which provided notable relief. She continued using tranexamic acid and progesterone to manage her condition, which remained under control for some time.

In the past year, the patient developed a UTI, and in its scanning process, they identified the uterus was very bulky. It was unhealthy and posed a substantial risk of complications to the urinary bladder. The bleeding had gotten worse and the medication wasn't enough to control it. The patient was given progesterone injections. When these measures failed to produce the desired outcomes, the patient opted to proceed with a hysterectomy. After almost a decade of menorrhagia, pain and struggle, the unanimous decision for surgery was made after consultation with her doctors and family. Fig 2 shows ultrasound of the uterus taken when the decision for surgery was made.



Fig. 2

HYSTERECTOMY

Total laparoscopic hysterectomy and bilateral salpingectomy was performed. Uterus was accessed through 4 ports. The

bladder was pulled up to moderate adhesions. Following the hysterectomy, the vaginal incision was closed with continuous sutures, and the pelvic cavity was washed. After the surgery, antibiotics and painkillers were administered. No postoperative complications or bleeding. Fig. 3 shows the hysterectomy procedure.

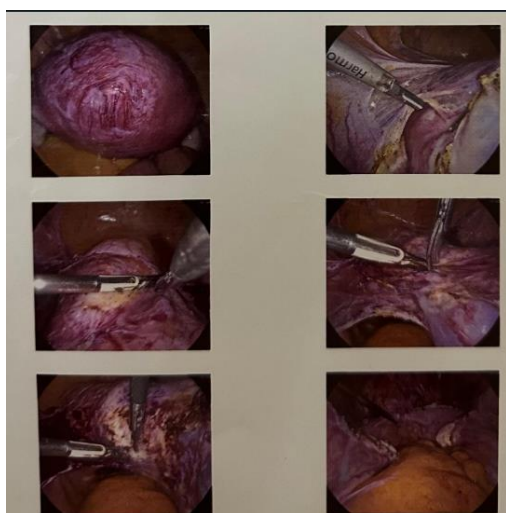


Fig. 3

DISCUSSION

Intrauterine leiomyoma is monoclonal benign neoplastic growth that happens in the muscular wall of the uterus usually in women aged 30- 50. Fibroids occurring in adolescent women are very rare. It can be of varying shapes and sizes and originates within the myometrium. The tumors are reduced in size after menopause. Leiomyoma occurs in 20-30% of females all over the world. [2] It is most common in African American women, and women of colour and least in white women. Some studies show 80% of African American women reporting fibroids and 70% of Caucasian women. [4] Some of the factors that contribute to the development of fibroids other than age and race are obesity, parity, use of hormonal contraceptives and hereditary factors. [6] Alcohol consumption leads to an increased risk of fibroids. Cigarette smoking has been controversial in fibroid research with some studies showing it has a beneficial effect and others showing the opposite.

Fibroids can be classified based on their location which can be intramural (within the myometrium), sub-serosal (protruding from the uterus) and submucosal (protruding into the uterine cavity) [3]

Fibroids can be either asymptomatic or symptomatic. Symptoms include menorrhagia which leads to anaemia, pain, irregular menstrual cycles, abdominal distention caused by enlargement of the uterus and urinary problems. Diagnostic methods include imaging. The primary imaging modality for fibroid detection is ultrasonography. MRI is the best method for mapping and identifying the number of fibroids. The use of CT is not recommended. [1]

Treatment plans are formulated by taking into consideration the patient's age, the impact of fibroids on the patient's life, the fertility desires of the patient, and proximity to menopause. Treating menorrhagia can be done by administering tranexamic acid and progesterone tablets. Mirena, which is an intrauterine contraceptive device is effective in inhibiting the growth of fibroids. For bigger fibroids, myomectomy can be done in women who wish to plan more pregnancies or want to keep their uterus intact. Hysterectomy is the most curative of the fibroid treatments as it eliminates the chance of recurrence. Another treatment method that has gained widespread popularity in recent times is uterine artery embolisation (UAE). [3]

CONCLUSION

Fibroids are uterine neoplasms that can be symptomatic or asymptomatic. It occurs in women in their reproductive age. They can be caused by a number of reasons ranging from environmental factors to gene mutations. Many women struggle with this condition which can significantly affect their quality of life. Despite being one of the most common disorders in women, there is very little awareness about it. It is important to raise awareness about this topic to help women lead healthier, more fulfilling lives.

Declaration by Author

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