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Case Report *Volume 6 Issue 1*

Uterine Fibroids in a Premenopausal Woman

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Abstract

Uterine fibroids, also known as leiomyomas, are common benign tumors of the uterus that often present with symptoms such as heavy menstrual bleeding, pelvic pain, and reproductive issues. This case report discusses a 42-year-old premenopausal woman who presented with severe menorrhagia and pelvic discomfort, leading to the diagnosis and management of multiple uterine fibroids. The management approach, including medical and surgical options, and the outcomes are discussed in detail.

Keywords: Uterine Fibroids; Menorrhagia; Pelvic Discomfort; Tranexamic Acid; Postoperative Care; Surgical Intervention

Introduction

Uterine fibroids are the most common pelvic tumors in women, with a prevalence of up to 70% by age 50 [1]. They are monoclonal tumors arising from the smooth muscle cells of the myometrium and are influenced by hormonal factors, primarily estrogen and progesterone [2]. Fibroids can cause significant morbidity, including heavy menstrual bleeding, pelvic pain, and infertility. The management of uterine fibroids depends on the severity of symptoms, size and location of the fibroids, and the patient's desire for fertility preservation. This case highlights the clinical presentation, diagnostic workup, and management strategies for a woman with symptomatic fibroids.

Case Presentation

Patient Information

Age: 42 years
Sex: Female
Ethnicity: Caucasian
Occupation: Teacher

Presenting Complaints

The patient presented with a six-month history of progressively worsening menorrhagia, resulting in significant anemia. She also reported intermittent pelvic pain, a sensation of pelvic pressure, and increased urinary frequency.

Medical History

Menstrual History: Regular cycles every 28 days, lasting 5-7 days, with heavy bleeding over the past six months.
Obstetric History: G2P2 (two full-term deliveries, no miscarriages).
Past Medical History: No significant past medical history.
Surgical History: No previous surgeries.
Medications: Iron supplements for anemia.
Family History: No family history of gynecological issues.
Social History: Non-smoker, occasional alcohol consumption.

Physical Examination

General: Pale conjunctiva, no jaundice.

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Abdomen: Non-tender, palpable mass in the lower abdomen corresponding to a 16-week gravid uterus.
Pelvic Examination: Enlarged, irregular uterus; no adnexal masses.

Investigations

Hemoglobin: 9.0 g/dL (reference range: 12-16 g/dL) [3].
Transvaginal Ultrasound: Multiple intramural and submucosal fibroids, the largest measuring 7 cm in diameter.
MRI of the Pelvis: Confirmed the presence of multiple fibroids, with the largest intramural fibroid measuring 7.2 cm [4].

Differential Diagnosis

The differential diagnosis for a woman presenting with heavy menstrual bleeding and pelvic mass includes:

- Uterine fibroids [5].
- Adenomyosis [6].
- Endometrial hyperplasia.
- Malignant uterine tumors (less likely given the benign ultrasound and MRI features).

Treatment

Initial Management

The patient was started on tranexamic acid to manage heavy menstrual bleeding and continued on iron supplements for anemia [7]. Non-steroidal anti-inflammatory drugs (NSAIDs) were also prescribed for pain management. After discussing surgical and non-surgical options, including the potential benefits and risks, the patient opted for surgical management due to the severity of her symptoms and her completed family.

Surgical Management

Given the size and number of fibroids, a total abdominal hysterectomy was recommended and performed, with preservation of the ovaries to prevent surgical menopause. Intraoperative findings confirmed the presence of multiple fibroids with no evidence of malignancy. The largest fibroid measured 7.2 cm, consistent with preoperative imaging. The surgery was uneventful, and the patient had a smooth postoperative recovery [1].

Postoperative Care

Postoperative care included pain management with opioids and NSAIDs, monitoring for signs of infection, and encouragement of early ambulation to prevent thromboembolic events. The patient was also advised on the importance of iron-rich foods and continued iron supplementation until her hemoglobin levels normalized.

Outcome and Follow-up

The patient reported significant improvement in symptoms post-surgery. Her hemoglobin levels normalized within three months, and she no longer experienced heavy menstrual bleeding or pelvic pain. Follow-up visits at three and six months postoperatively showed no complications, and the patient expressed satisfaction with the outcome. The patient was able to return to her normal daily activities and work without any limitations.

Discussion

Uterine fibroids are a common cause of heavy menstrual bleeding and pelvic pain in premenopausal women. The pathogenesis of fibroids is not fully understood, but genetic, hormonal, and environmental factors play a role [2]. This case highlights the importance of a thorough clinical evaluation and the role of imaging in diagnosing fibroids. The use of transvaginal ultrasound and MRI was crucial in determining the size, number, and location of fibroids, which informed the management plan [8].

Management should be individualized, taking into account the patient's symptoms, size and location of fibroids, and reproductive plans. For symptomatic relief, medical management options include nonsteroidal anti-inflammatory drugs (NSAIDs), hormonal therapies such as oral contraceptives or GnRH agonists, and tranexamic acid [7]. Surgical options include myomectomy for women desiring future fertility and hysterectomy for those who do not [1].

In this case, the patient's preference for definitive treatment and her completed family history guided the decision towards hysterectomy. The procedure was successful, with no postoperative complications, and resulted in the resolution of symptoms, highlighting the effectiveness of this approach for severe symptomatic fibroids [1]. Regular follow-up is essential to monitor for any long-term complications and ensure continued well-being.

This case also underscores the importance of considering the patient's quality of life and the impact of fibroid-related symptoms on daily activities. The significant improvement in the patient's hemoglobin levels and the resolution of her symptoms post-surgery emphasize the potential benefits of surgical intervention in appropriately selected cases [3].

Conclusion

This case illustrates the successful management of symptomatic uterine fibroids with surgical intervention, resulting in symptom resolution and improved quality of life

for the patient. Regular follow-up and a multidisciplinary approach are crucial in managing such cases effectively. This case underscores the importance of personalized treatment plans that consider the patient's symptoms, reproductive desires, and overall health. The decision-making process should involve a detailed discussion of all available treatment options, ensuring that the chosen management aligns with the patient's preferences and clinical needs.

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