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Multiple Fibroid Uterus

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Abstract: ***Multiple fibroids in the uterus, also known as uterine leiomyomas, are common benign tumours that affect a significant portion of women, particularly those of reproductive age. These tumours can vary in size, number, and location within the uterus and may cause a wide range of symptoms, including heavy menstrual bleeding, pelvic pain, urinary frequency, and reproductive challenges such as infertility or pregnancy complications. The exact aetiology of uterine fibroids remains unclear, but genetic, hormonal, and environmental factors are thought to contribute to their development. Diagnosis is typically achieved through pelvic examination, ultrasound, and MRI, while treatment options vary depending on symptom severity, size, and location of the fibroids. Management approaches include medical therapy (e.g., GnRH agonists, progestins), minimally invasive procedures (e.g., uterine artery embolisation, myomectomy), and in severe cases, hysterectomy. Multiple fibroids complicate treatment decisions and require a personalised approach to ensure optimal outcomes. Continued research into the pathophysiology and treatment modalities of multiple fibroid uteri remains crucial for improving patient care.***

Keywords: fibroid uterus, gynaecological disorder, aetiology, diagnosis, treatment, complication, management

1. Introduction

Uterine fibroids, also known as leiomyomas or myomas, are benign smooth muscle tumours that develop in the uterus. They are the most common benign gynaecological tumours, affecting a significant percentage of women, particularly those of reproductive age. The exact prevalence of uterine fibroids varies, with studies suggesting that up to 70-80% of women may develop fibroids during their lifetime. The condition is more common among women of African descent and those in their 30s and 40s.

Uterine fibroids can occur as solitary or multiple tumours, which can vary in size, number, and location within the uterus. These fibroids may be asymptomatic or cause a range of symptoms, including heavy menstrual bleeding (menorrhagia), pelvic pain, urinary frequency, and, in some cases, infertility or pregnancy-related complications. The presence of multiple fibroids can complicate the clinical picture, making diagnosis and management more challenging.

2. Indication of Multiple Fibroids Uterus

Hormonal imbalance
Genetic factors
Age
Obesity
Diet
Environment factors
Pregnancy
Other Hormonal Disorders

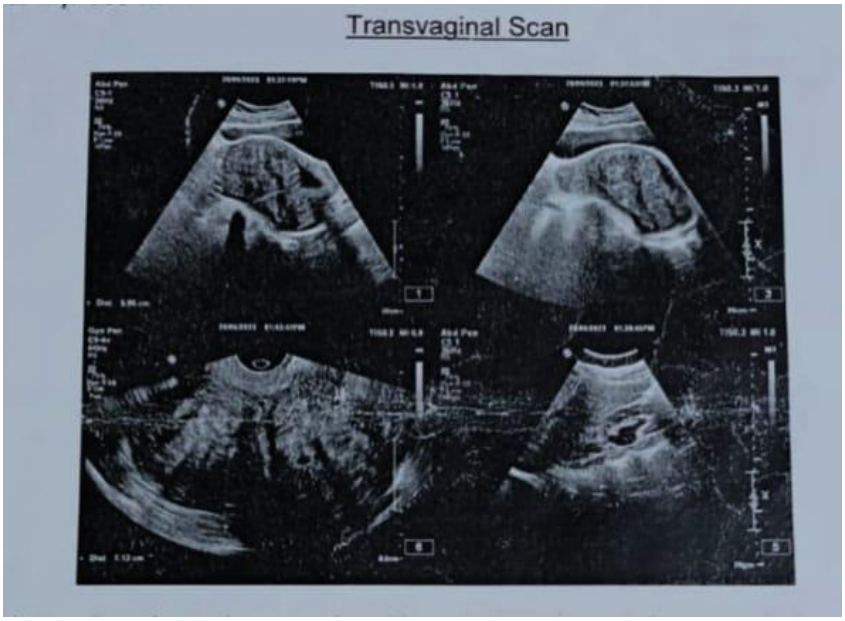
3. Diagnosis

Medical history
Physical examination
Ultrasound
MRI
Hysterosonography
Hysterosalpingography
Endometrial biopsy
Hysteroscopy

Case study of Mrs. X,
Mrs. X, a 34-year-old woman, was admitted to KJK Hospital with complaints of Nulligravida with primary infertility came with an ultrasound suggestive of a multiple fibroid uterus. She was found to be conscious and oriented. Her vital signs were as follows:
Temperature:98.6
Blood pressure:130/90mm Hg
Pulse:108 beats /min
Spo2:99%°F
Respiration:22 breaths/min

The Transvaginal Scan report showed that the uterus is enlarged, measuring 12 cm in length, and revealed an intramural fibroid at the fundus measuring 6 cm in size, along with multiple small intramural fibroids measuring between 1.5 cm and 5 cm in size in both the anterior and posterior walls. No significant degenerative changes are seen. The uterine cavity is clear, and the endometrial thickness measures 4 mm. The ovaries are normal on both sides, with no suggestion of PCOD, and the pouch of Douglas is clear. Impression: Multiple fibroids with thin endometrium.

Investigation
The Transvaginal Scan report was the results are as follows:



Figures: Transvaginal Scan image of a multiple-fibroid uterus

Lab Reports
Hb:12.7g/dl
Blood group: B Positive
Serology: Negative
TSH:4.85Miu/ml
WBC:13800 cell/cu.mm
Platelet Count:3.04 lakhs/cumm
CRP:17.3 Mg/L
Serum Potassium:3.810 MMOL/L
Serum Sodium:136.950 mEq/L
Echo: Normal Study

Procedure
The surgery procedure performed on the patient was a Laparoscopic Myomectomy Operative Hysteroscopy

Complication
Bleeding
Infection
Injury to the surrounding organs
Uterine rupture
Conversion to open surgery
Recurrence of fibroids
Uterine perforation
Infertility is seen in about 30% of women
Pain during sex
Pregnancy complication

Signs and Symptoms

Book Picture	Patient Picture
Lower Abdominal Pain	Present
Irregular Periods	Not Present
Backache	Present
Heavy Menstrual Bleeding	Not Present
Constipation	Not Present
Infertility	Present
Pain During Intercourse	Present
Frequency Urination	Not Present

Nursing management
Assess and monitor the blood volume (Hb). Promote a high-fibre diet, adequate hydration, and regular physical activity to prevent constipation.
Advise the patient to reduce stress levels, which may help reduce the risk of fibroids
Advise the patient to avoid sexual intercourse

Assessment
- Assessment of vaginal bleeding
- Palpation for any masses or tenderness present in the abdomen.
- Complete blood count (CBC) to check for anaemia.
- Hormonal assays if indicated (e.g to rule out other causes of menstrual irregularities)

Nursing Diagnosis
1) Pain related to pelvic pressure from fibroids.
2) Impaired Urinary Elimination related to pressure on the bladder from the enlarged uterus
3) Constipation related to bowel compression.
4) Risk for Deficient Fluid Volume related to heavy menstrual bleeding (menorrhagia)
5) Anxiety related to diagnosis and the potential need for surgery
6) Knowledge Deficit related to unfamiliarity with the condition and treatment options
7) Impaired Sexual Function related to pain or discomfort during intercourse associated with uterine fibroids.
8) Risk for Impaired Fertility related to the potential impact of uterine fibroids on reproductive organs and fertility.

Planning
1) The patient will demonstrate improved comfort with reduced need for analgesics.
2) The patient will maintain normal voiding patterns within 3 days of treatment.
3) The patient will report regular bowel movements within 3 days.
4) Risk for deficient fluid volume related to potential heavy menstrual bleeding.

5) Anxiety related to diagnosis and potential need for surgery.
6) Knowledge deficit related to unfamiliarity with the condition and treatment options.
7) The patient will report improved comfort during sexual activity over time.
8) The patient will verbalise understanding of fertility preservation options.

Implementation

1) Administer prescribed analgesics as per the physician's order.
2) Monitor urinary output and frequency.
3) Encourage a high-fibre diet and adequate fluid intake.
4) Encourage oral fluids and administer IV fluids as needed.
5) Provide emotional support and encourage questions.
6) Use visual aids (e.g., scan images) to enhance understanding.
7) Educate on the physical effects of fibroids on sexual function.
8) Explain the relationship between fibroids and infertility.

Evaluation

1) Patient reports reduced pain from 8/10 to 3/10 within 48 hours.
2) Urinary output is within normal limits (1500–2000 mL/day).
3) Patient reports normal bowel function by day 3 of hospitalization
4) Stable vital signs, Hb maintained at 12.7 g/dL. No signs of hypovolemia noted.
5) Patient verbalises understanding of the condition and feels more confident post-counselling.
6) The patient can correctly explain her diagnosis and treatment.
7) Patient reports increased awareness and willingness to address sexual concerns.
8) Patient understands fertility risks and treatment options.

References

[1] Baird, D. D., et al. (2003). High cumulative incidence of uterine leiomyoma in black and white women: ultrasound evidence. American Journal of Obstetrics and Gynaecology, 188(1), 100–107.
[2] Stewart, E. A. (2015). Uterine fibroids. The Lancet, 357(9252), 293–298.
[3] Practice Committee of the American Society for Reproductive Medicine. (2017). Myomas and reproductive function. Fertility and Sterility, 108(3), 416–425.4. ACOG. (2021). Management of Symptomatic Uterine Leiomyomas. Practice Bulletin No. 228.
[4] NHS. (2022). Uterine fibroids - Symptoms and Treatment. https://www.nhs.uk