



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

UNUSUAL PRESENTATION OF LEIOMYOMA IN PREGNANCY – CASE REPORT

KEY WORDS: Leiomyoma, Pregnancy, Red Degeneration, Fibroids, Obstetric Complications

Dr. Priyanka Singh	Junior Resident, Department of Obstetrics and Gynaecology, D.Y. Patil Hospital.
Dr. Nilofer Yelurkar	Associate Professor, Department of Obstetrics and Gynaecology, Dy Patil Hospital.
Dr. Esha Bhandari	Junior Resident, Department of Obstetrics and Gynaecology, D.Y. Patil Hospital.

ABSTRACT

Leiomyomas, or uterine fibroids, are the most common benign uterine tumors affecting women of reproductive age. During pregnancy, they can present with atypical symptoms, leading to diagnostic and therapeutic challenges. This paper discusses an unusual presentation of leiomyoma with red degeneration, mimicking acute abdominal conditions, and outlines the diagnostic and management approach. A 32-year-old gravida 4 para 1 woman presented with abdominal pain, distention, and breathlessness, initially suspected to have an ovarian cyst. Imaging and intraoperative findings revealed a degenerated fibroid associated with a benign mesothelial cyst. This case highlights the importance of accurate diagnosis and individualized management in pregnant women with fibroids.

INTRODUCTION

Leiomyomas are the most common benign tumors of the uterus, with an incidence of 20–40% among women of reproductive age. They originate from smooth muscle cells and can be classified as submucosal, intramural, or subserosal. Estrogen and progesterone influence their growth, and they tend to enlarge during pregnancy due to increased hormonal levels. While many fibroids remain asymptomatic, some can cause complications such as pain, miscarriage, fetal growth restriction, and labor obstruction.

This paper aims to highlight an unusual presentation of a large leiomyoma in pregnancy, emphasizing its diagnostic challenges, clinical manifestations, and the management strategies employed to ensure a favorable maternal and fetal outcome.

Pathophysiology And Hormonal Influence

Fibroid growth during pregnancy is influenced by hormonal changes, leading to secondary degenerations such as hyaline, cystic, calcific, and red degeneration. Red degeneration, or hemorrhagic infarction, occurs in 8% of fibroids in pregnancy and is associated with acute pain, fever, and tenderness due to insufficient blood supply.

Fibroid degeneration often results from inadequate vascular supply due to rapid growth. Red degeneration is more common in the second trimester due to increased estrogen levels, which lead to vascular compromise. The clinical symptoms of red degeneration include localized tenderness, nausea, vomiting, and sometimes leukocytosis. Management is usually conservative, involving analgesia, hydration, and bed rest, though severe cases may require hospitalization.

Case Report

A 32-year-old woman with secondary infertility presented with progressive abdominal distension, pain, and breathlessness for two months. She had a history of previous full-term normal delivery (FTND) and two early pregnancy losses. Initial evaluation suggested an ovarian cyst, and ascitic fluid tapping was performed. Laboratory investigations showed normal tumor markers except for a mildly elevated CA-125 level (86.6 U/mL).

During her current pregnancy, she developed severe pain at 7+4 weeks and required hospitalization. Multiple ascitic fluid aspirations were performed, all negative for malignancy. By 15+6 weeks, ultrasound showed a gravid uterus with a large

ovarian cyst (22×25×17 cm). Due to increasing symptoms, an exploratory laparotomy was planned.

Table 1: Summary Of Patient's Clinical Presentation

Parameter	Findings
Age	32 years
Symptoms	Abdominal pain, distension, breathlessness
Past Obstetric History	FTND, two early miscarriages
Imaging Findings	Large ovarian cyst, suspected fibroid
Tumor Markers	CA-125 elevated (86.6 U/mL)
Management	Exploratory Laparotomy

Intraoperative Findings And Management

Surgical exploration revealed a multiloculated mass with septations arising from the uterine fundus, associated with multiple cysts. A fibroid measuring 3×2 cm was identified at the fundus. Right salpingectomy was performed due to tube involvement. Histopathology confirmed a degenerated leiomyoma with benign mesothelial cysts. The patient was monitored throughout the antenatal period and underwent an elective cesarean section at 36 weeks, delivering a healthy female infant.

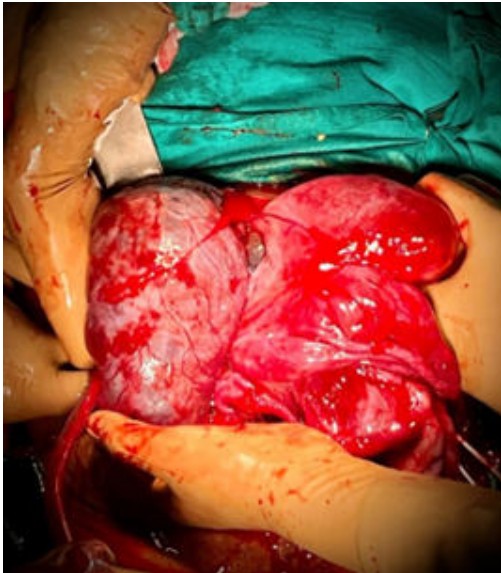


Fig 1 : Gravid Uterus with fibroid. with multiple cyst

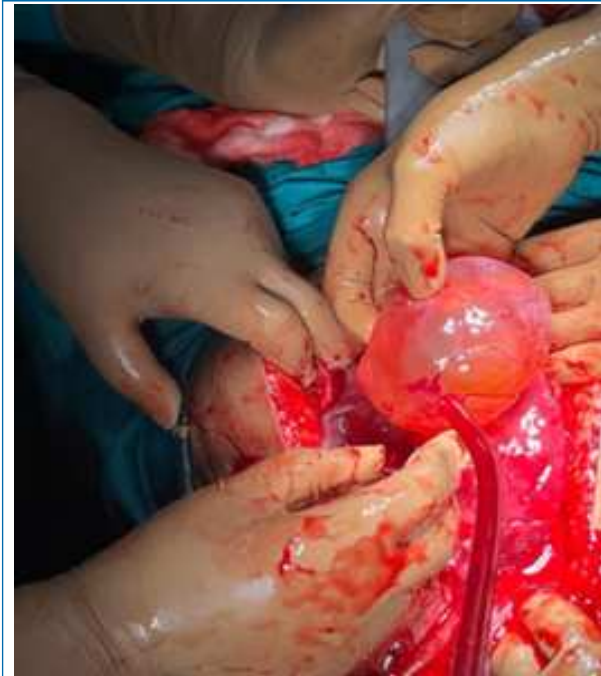


Fig 2 : Intraoperative Multiloculated Mass With Septations And Cyst



Fig 3 : Intra operative uterus post elective LSCS at 36 weeks of gestation

Diagnostic Modalities

Accurate diagnosis of leiomyomas in pregnancy requires a combination of clinical examination and imaging.

Ultrasound (USG)

Ultrasound is the primary imaging modality for detecting fibroids during pregnancy. However, degeneration may cause changes that make differentiation from other pelvic masses challenging.

Magnetic Resonance Imaging (MRI)

MRI provides superior soft tissue resolution and helps distinguish fibroids from ovarian masses or malignancies.

Table 2: Imaging Characteristics Of Leiomyoma And Differential Diagnoses

Condition	Ultrasound Findings	MRI Features
Leiomyoma	Hypoechoic, well-defined	Low T2 signal, variable enhancement
Ovarian Cyst	Anechoic, thin-walled	High T2 signal, no enhancement
Red Degeneration	Heterogeneous, hypoechoic	T1 hyperintense, T2 hypointense
Placental Abruptio	Retroplacental hematoma	T1 hyperintense blood clot

Management Approaches

Conservative Management

Most cases of fibroid degeneration are managed conservatively. Pain relief with acetaminophen and hydration is the mainstay of treatment. Nonsteroidal anti-inflammatory drugs (NSAIDs) are used cautiously in the second trimester.

Surgical Intervention

Surgery is reserved for complications like fibroid torsion, necrosis, or obstruction of labor. Myomectomy during pregnancy is typically avoided due to the risk of hemorrhage. However, in cases of severe pain or complications, laparotomy may be necessary.

Obstetric Management

Fibroids can lead to preterm labor, fetal growth restriction, and abnormal placentation. Regular monitoring with serial ultrasounds is advised. Vaginal delivery is possible in most cases unless fibroids obstruct the birth canal.

DISCUSSION

Leiomyomas during pregnancy present unique diagnostic and management challenges. Their growth and degeneration are influenced by hormonal changes, and their presence can lead to complications such as fetal malpresentation, preterm labor, and obstructed labor.

The case presented highlights the difficulties in differentiating leiomyomas from other pelvic masses, emphasizing the role of imaging in diagnosis. Misdiagnosis can lead to unnecessary interventions, making a thorough evaluation crucial. While conservative management is preferred, surgical intervention is sometimes necessary to ensure maternal and fetal safety.

Prognosis And Follow-up

The prognosis for pregnant women with fibroids is generally favorable with appropriate monitoring. However, complications such as miscarriage, placental abruptio, and postpartum hemorrhage require vigilance. Regular follow-up with obstetricians and radiologists is essential to optimize outcomes.

CONCLUSION

Leiomyomas in pregnancy can present with unusual and challenging symptoms. Accurate diagnosis, regular monitoring, and a multidisciplinary approach are crucial for optimal maternal and fetal outcomes. Surgical intervention, though rare, may be necessary in cases with significant complications.

This case reinforces the need for heightened awareness among clinicians regarding atypical presentations of fibroids in pregnancy and the importance of individualized patient management.

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