

Red Degeneration of Multiple Uterine Fibroids in Term Primigravida: A Case Supporting Caesarean Myomectomy

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Abstract: *Background:* This study aims to evaluate a rare possible and clinically significant case of red degeneration of uterine fibroids during the first term of pregnancy in a woman. The purpose of it was to put lights on clinical presentation and surgical management in regard to this very rare condition. A 39 weeks and 5 days old primigravida presented with pregnancy complicated with fibroids. There were multiple uterine fibroids undergoing red degeneration at her presentation. The surgery consisted of a myomectomy done with the elective lower segment caesarean section (LSCS). During surgery, three fibroids were found to exist: one in the anterior wall, one at the fundal region, and one at the lateral wall of the uterus. The Histopathological examination confirmed red degeneration. The course of the operation was unremarkable, and the recovery of the mothers was complete without any complications in the new-born. This is a case showing successful management of red degeneration of fibroids in a pregnant state, and it favours concurrent myomectomy and caesarean delivery in selective cases. This calls for individualized approach witnessing that the evolution of clinical thought that favours tailor-made surgical approach rather than the traditional conservative management applies when red degeneration is associated with obstructive fibroids at term.

Keywords: Red degeneration, uterine fibroids, Pregnancy complications, Myomectomy, Caesarean section, Case report

INTRODUCTION

Uterine fibroids (leiomyomas) are the most prevalent benign tumors of the female reproductive tract, with an estimated prevalence of 20–40% among women of reproductive age [1]. Although many fibroids remain asymptomatic, their coexistence with pregnancy can present substantial clinical challenges, such as miscarriage, fetal malpresentation, preterm labor, obstructed labor, and postpartum haemorrhage [2]. A certain type of fibroid degeneration that has been mainly associated with pregnancy called as red degeneration (carneous degeneration). This is caused by venous thrombosis within the fibroid, leading to hemorrhagic infarction and necrosis. Normally observed during the second and third trimester, red degeneration is noticeable by acute abdominal pain, uterine tenderness, and mild pyrexia [3]. But it can mimic other obstetric emergencies like placental abruption or ovarian torsion so a careful differential diagnosis is required. [4].

The basic principle of treatment is conservative management that involves analgesia and hydration. However, in rare but complex cases, particularly at term, surgical intervention becomes essential. The standard reluctance toward myomectomy during caesarean section stems from the fear of severe hemorrhage and potential uterine rupture [5]. However, a growing body of evidence supports selective caesarean myomectomy in well-prepared and hemodynamically stable patients [6, 7].

This case report contributes to the ongoing clinical discourse by detailing a case of red degeneration at term managed via LSCS with myomectomy, reinforcing the value of individualized surgical planning. Recent reviews have proposed that when fibroids contribute directly to delivery obstruction or severe maternal discomfort, myomectomy during caesarean—when performed by skilled surgeons—can be both safe and beneficial [8].

CASE REPORT

39-week and 5-day primigravida presented with persistent, sharp, non-radiating lower abdominal pain, worsening with movement, and Localized uterine discomfort. She had no history of fever, vaginal bleeding, and uterine contractions. She had no past relevant medical history with a prior diagnosis of asymptomatic uterine fibroids and no known chronic illnesses or surgical interventions.

Vital signs were stable, three fibroids had been detected through ultrasound a 3×4 cm anterior wall fibroid (subserosal and intramural), a 2×2 cm fundal subserosal fibroid, and a 4×5 cm lateral wall subserosal fibroid., there were no indications of fetal distress or placental complications. The fetal heart rate was within normal limits and the cervix was closed and cephalic presentation was confirmed.

Due to the presence of multiple fibroids, persistent pain, and the risk of labor obstruction, conservative management was deemed unsuitable. A planned LSCS was undertaken under spinal anaesthesia. Intraoperative findings confirmed the fibroids, and myomectomy was performed without complications (Fig.1 and Fig.2). Vasopressin infiltration and uterotonics were employed intraoperative to minimize blood loss—a strategy supported by emerging surgical protocols [6].

Figure 1



Figure 2



Histopathological examination confirmed red degeneration. Postoperative recovery was uneventful, with no evidence of hemorrhage or infection. The patient was discharged on postoperative day four in good condition, and the neonate exhibited no abnormalities.

DISCUSSION

This case highlights the developing method for treating red degeneration of fibroids at term. Historically, conservative management has been the norm, especially in the second trimester [3]. However, at term, when fibroids interfere with labor or cause unbearable pain, surgical options must be considered.

Due to the risk of hemorrhage performing myomectomy during caesarean remains controversial [5, 9]. Nonetheless, studies have shown that when performed by experienced teams using meticulous hemostatic techniques, outcomes can be favorable [6, 7, 10]. In this case, intraoperative blood loss was controlled, and the surgical outcome was excellent.

According to a recent systematic review by Liang et al., the caesarean myomectomy, particularly with a narrow base and subserosal fibroids, can be as safe as standard LSCS when supported by adequate perioperative preparation [7]. In this particular case, this is consistent with our findings and surgical experience.

Furthermore, myomectomy during caesarean delivery may reduce the need for future surgery and its associated risks. The gravid uterus offers better exposure and may even reduce vascularity in some cases, contrary to earlier beliefs [9]. Studies also suggest that uterine involution post-delivery might reduce recurrence of symptoms and improve future reproductive outcomes when fibroids are removed during LSCS [11].

Nonetheless, this case report is subject to certain limitations. Long-term outcomes, such as fertility preservation and fibroid recurrence, were not assessed. Additionally, it reflects a single-center experience and may not be generalizable. A prospective multicenter study is needed to determine standardized criteria for safe caesarean myomectomy and quantify its long-term implications.

CONCLUSION

This report points out the importance of personalized clinical treatment in managing fibroids during pregnancy. While non-surgical management remains the

standard for red degeneration, this case highlights the feasibility of surgical intervention in selected term pregnancies. Successful outcomes depend on patient selection, surgical expertise, and institutional readiness. With increasing maternal age and fibroid prevalence in pregnancy, caesarean myomectomy is likely to become a more frequent consideration in obstetric practice. to define its role more clearly, Evidence-based protocols and further research are needed

AUTHOR'S CONTRIBUTIONS

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CONFLICTS OF INTEREST

Authors declare no conflict of interest among themselves

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