

# Giant Fibroma during Pregnancy: A Case Report

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**Abstract:** *Fibroids are the most frequent tumors of the female reproductive system, affecting 20%–60% of women of reproductive age. Depending on their number, location and size, they may distort uterine anatomy and can adversely affect uterine physiology. The association of fibroid and pregnancy is an increasingly frequent situation. We report the case of a patient presenting with a huge subserous fibroid in aseptic necrobiosis causing a real problem of maternal tolerance on a pregnancy of 24-week. In front of the worsening of the maternal symptomatology, we decide to carry out a myomectomy after obtaining the full informed consent of the couple.*

**Keywords:** fibroids; leiomyoma; miscarriage myomectomy; recurrent pregnancy loss

## 1. Introduction

Uterine fibroids are the most commonly recorded benign tumors of the female reproductive system, affecting 20%–60% of women of reproductive age [1, 2]. Women of African American and Afro-Caribbean origin and those with a family history of fibroids are more likely to have fibroids. Rates of uterine leiomyoma in black women were significantly higher for diagnoses confirmed by ultrasound or hysterectomy (relative risk 3.25; 95% confidence interval 2.71– 3.88) compared with rates among white women. However, 50% of women with fibroids are asymptomatic, making it difficult to estimate the exact prevalence. The incidence of fibroids increases with age, reaching 70-80% by the age of 50 [3]. Uterine leiomyoma are known to occur in 0.1%–10.7% of pregnant women [4–6] and with the increasing age of obstetric patients, more cases are being encountered during pregnancy.

Visualization of fibroids in pregnancy can be problematic, partly because of the difficulty of ultrasonography in differentiating fibroids from physiological thickening of the myometrium. It is therefore likely that the prevalence of fibroids in pregnancy is underestimated. Although the majority of women with fibroids will have uneventful pregnancies, approximately 10-28% of women will develop complications. The effect of leiomyoma on pregnancy depends on their number, size and location. Increased rates of implantation failure and early pregnancy loss have been consistently reported in women with submucosal fibroids and intramural fibroids that distort the endometrium [7].

Fibroids have been associated with abdominal pain, spontaneous abortion, changes in fetal position, placental abruption, premature rupture of membranes, cesarean deliveries, postpartum hemorrhage, preterm delivery, and low birth weight infants [8, 9].

Myomectomy is generally avoided during pregnancy because increased vascularity can lead to hemorrhagic complications that may necessitate hysterectomy, but it is indicated in some situations [10, 11]. Most cases described in literature have been done during a cesarean section, while

few cases of subserosal myomectomy are described during pregnancy [10, 12].

## 2. Case Report

We report a case of a 24 year old patient, primigravida, pregnancy estimated at 24 SA from Morocco, with no notable medical or surgical history.

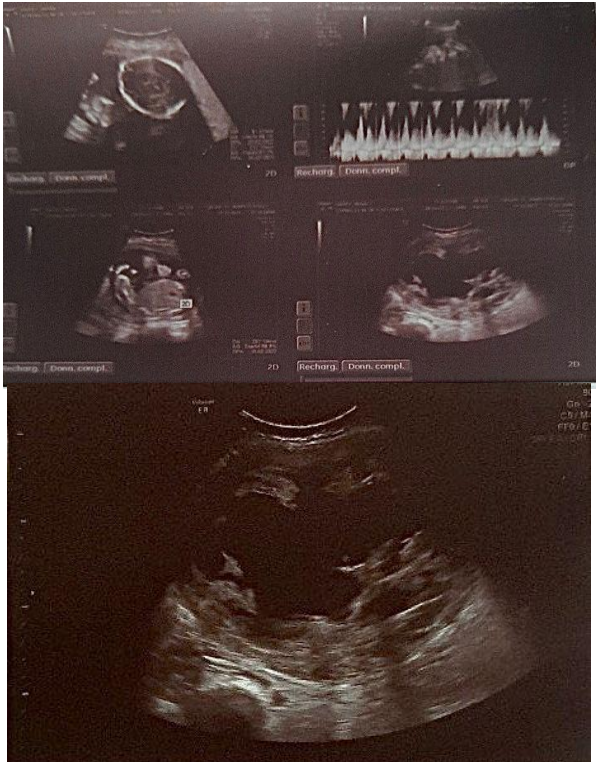
The patient consulted for the first time at the emergency room of the Souissi maternity hospital in Rabat, for dyspnea, vomiting and pain in the left iliac fossa in the context of a weight loss estimated at 10 kg.

On clinical examination, the patient was afebrile and hemodynamically stable, the body mass index was 20, abdominal palpation was generally painful and found a voluminous mobile mass of 20 cm long axis rising above the umbilicus.

The gynecological examination shows a mid-long cervix dilated to 2 cm and a premature rupture of the membranes.

Temporarily calmed by analgesics, the abdominal pain syndrome and dyspnea worsen.

Pelvic ultrasound confirmed the diagnosis of a monofetal intrauterine pregnancy evolving at 24 weeks of amenorrhea (SA) and revealed the presence of a latero-uterine mass measuring approximately 19 cm\*15cm, which initially evoked a subserous fibroma in aseptic necrobiosis. (Fig. 1)



**Figure 1:** Pelvic ultrasound of a monofetal intrauterine pregnancy at 20 weeks of amenorrhea and a subserous fibroma in aseptic necrobiosis, measuring approximately 19 cm\*15cm.

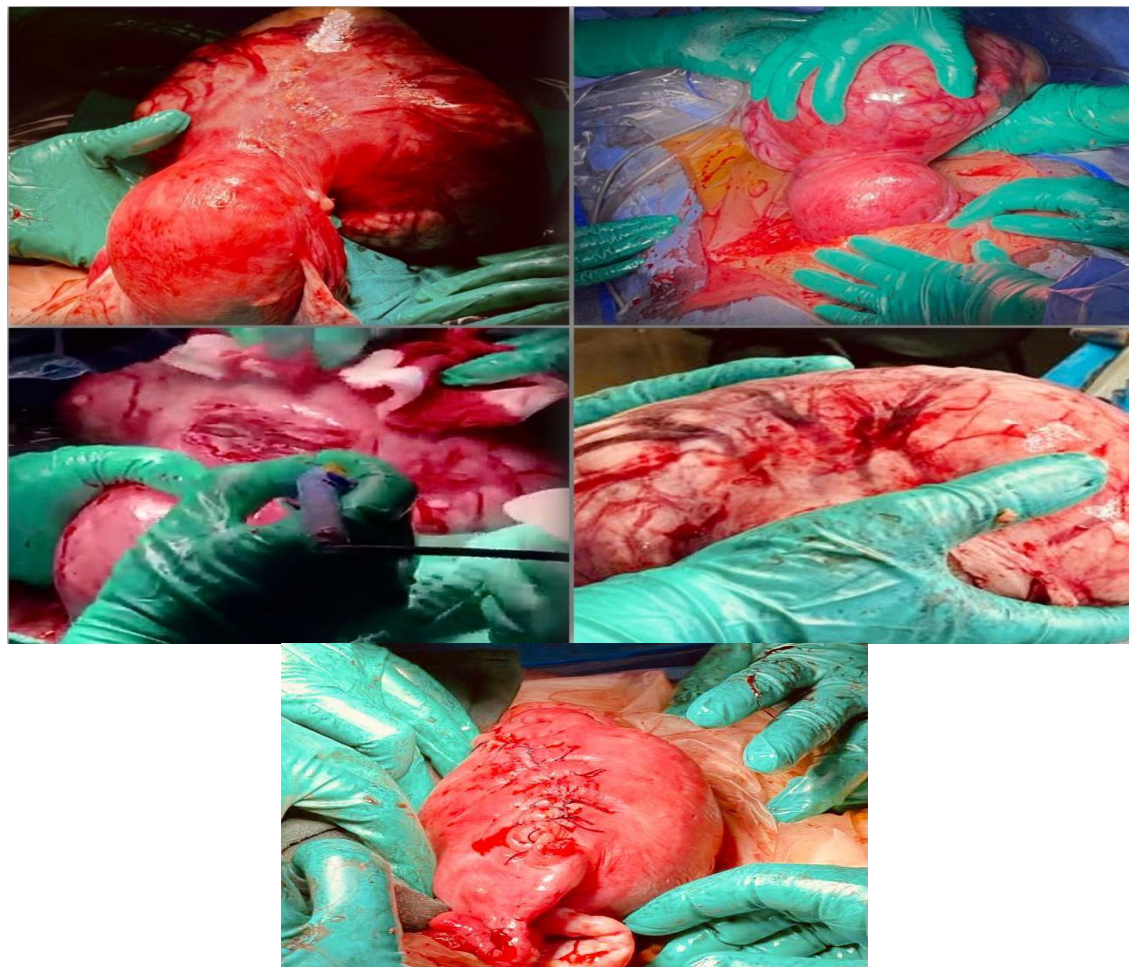
The iconographic assessment is completed by abdominopelvic magnetic resonance imaging, that confirms the fibromatous nature of the latero uterine mass.

The biological evaluation shows an anemia with 7g/dl of Hemoglobin and a PCR at 70, the rest of biological results were without any particularity.

In front of the worsening of the maternal symptomatology and in the presence of a situation threatening the continuation of the pregnancy, in spite of analgesic, antibiotic and tocolytic treatment, we decide to carry out a myomectomy after obtaining the full informed consent of the couple.

Unfortunately the patient went into labor and had an abortion the same day.

After booking the operating room and the patient's transfusion, we performed the myomectomy through a Pfannenstiel incision. Almost the entire abdominopelvic cavity was occupied by a 20/18 cm sub-serous fibroid.(Fig. 2)



**Figure 2:** Myomectomy of a subserous fibroma in aseptic necrobiosis, measuring approximately 20/18 cm

The pedicle of the fibroid was freed and then ligated with a synthetic absorbable Vicryl suture, then coagulated and sectioned flush with the fibroid, leaving a stump which limited the fragility of the myometrium. The remainder of the abdominopelvic cavity was normal.(Fig. 2)

The histological examination of the surgical specimen confirmed the diagnosis of a uterine leiomyoma in necrobiosis, with no suspicious signs of malignancy.

The postoperative recovery was normal with a clinical improvement and the patient was discharged home on the 6th post-operative day.

### 3. Discussion

Cases of myomectomy during pregnancy are rare, the prevalence of uterine myomas during pregnancy is reported to be 2–3%. Most myomas remain asymptomatic during pregnancy, and routine ultrasonography performed at this time improves the detection of these lesions and the evaluation of any possible complications. It has been reported that 10% of pregnant women with myoma suffer complications during pregnancy or delivery, including spontaneous abortion, antepartum or postpartum hemorrhage, premature rupture of membranes, preterm delivery, placenta previa, placental abruption, fetal malpresentations, mechanical dystocia and high incidence of cesarean section.[13-15]

Impact of fibroids on pregnancy loss fetal wastage in the presence of fibroids, where the suggestion is that the fibroids were implicated in the wastage, has been reported in several studies, with improvement following myomectomy adding credence to the assumption that fibroids could cause miscarriage.

Due to their increased risk of spontaneous abortion and preterm delivery, these women are often managed in “high-risk pregnancy” clinics, they are submitted to a continuous and careful ultrasound monitoring during pregnancy and they must often undergo a prolonged pharmacological therapy. [13-15]

Pregnant women with myoma should undergo frequent ultrasound evaluation during pregnancy in order to monitor both fetal growth and myoma size.

During the first trimester, leiomyomas of all sizes either remained unchanged or increased in size, whereas during the second trimester smaller myomas ( $2\pm 6$  cm) usually remained unchanged or increased in size whilst larger myomas became smaller. During the third trimester, myomas usually remained unchanged or decreased in size, regardless of their initial dimensions.

Among published cases, the myomectomy was always performed before 24 SA, almost always by laparotomy [16-18], with quite satisfactory results.

There are a few cases of laparoscopic myomectomy, always performed in the context of fibroid complication, for pedicle fibroids whose size did not exceed 15 cm [18].

Indications for myomectomy during pregnancy include severe abdominal pain due to torsion of subserous pedunculated myomas or red degeneration not responding to medical treatment, and an increase in myoma size causing abdominal discomfort. It has been reported that if symptoms persist after 72 h of therapy, then surgical intervention must be considered [19-20].

In our case report, the cause of the acute abdominal pain was necrobiosis degeneration of a huge subserous leiomyoma (fig.3). In situations of acute abdominal pain syndrome with a pelvic mass, laparotomy should be performed.

The various cases of myomectomy by laparotomy performed during pregnancy, reported in the literature [12, 17, 21], have shown reassuring results, with a normal course of the pregnancy and the possibility of vaginal delivery.

Although further studies are needed to establish the frequency of adverse effects, laparoscopy is considered safe during the first and second trimesters of pregnancy [22, 23].



**Figure 3:** Necrobiosis degeneration of a huge subserous leiomyoma measuring approximately 20/18 cm

The risks of surgery on the gravid uterus, especially for leiomyoma, are emphasized. The use of monopolar electric current should be avoided in the proximity of the gravid uterus, especially during laparoscopic surgery, because the increased vascularity and tissue impedance may increase the risk of electrosurgical damage. Septic necrosis of the myometrium may result, but a successful conclusion to the pregnancy is still possible with careful monitoring and preventive cesarean section for these patients [17].

In conclusion, regular follow-up and appropriate medical care can prevent and treat most complications. The surgical management of uterine leiomyoma during pregnancy may be performed successfully in carefully selected patients, and this seems to lead to an improvement in pregnancy outcome.

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