



# Successful Myomectomy during Pregnancy for a Large Uterine Fibroid Causing Intestinal Obstruction: Report of a Case

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## ABSTRACT

Myomectomy is a rare decision taken by O & G specialist in the management of uterine fibroids during pregnancy because hazardous outcome. Management of uterine fibroids during pregnancy is usually expectant making myomectomy a rather rare possibility. This is why surgical removal is generally delayed until after delivery. The current case was a large, symptomatic multiple uterine myomas causing pressure symptoms and was diagnosed during pregnancy by ultrasound and successfully managed by antepartum myomectomy retaining the fetus alive in utero at 18-20 weeks gestation. At term, the patient was delivered by Caesarian hysterectomy due to the presence of multiple myomas occupying the lower segment with placenta accrete, and uncontrolled blood loss from the placental bed. The patient remained uneventful in next 20 weeks follow-up. This case demonstrates the safety of myomectomy during pregnancy in special circumstances such as intestinal obstruction caused by external compression by a big fibroid.

**Key words:** Uterine fibroid, Antepartum, Myomectomy.

## INTRODUCTION

Uterine fibroids can occur during pregnancy, and their management is usually delayed until after delivery.<sup>1</sup> However, although rare, they can cause complications during pregnancy making surgical intervention necessary.<sup>2-3</sup>

Present case was a huge uterine fibroid (weight 8.9 kg), in a 38 years old primigravida (Figure 1), which presented with intestinal obstruction due to pressure effect during the second trimester. This actually demanded emergency myomectomy, while retaining the fetus alive in utero. At full term, she gave birth by caesarian hysterectomy because of placenta accrete, multiple uterine fibroids in the lower segment and uncontrolled blood loss. The case revealed the safety of myomectomy during pregnancy in special circumstances such as intestinal obstruction caused by external compression by a big fibroid.

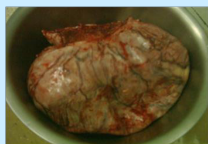
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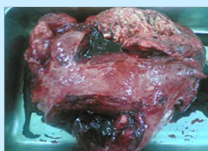
### Successful Myomectomy during Pregnancy for a Large Uterine Fibroid Causing Intestinal Obstruction: Report of a Case



A 38-years old primigravida (18-20 weeks gestation) presented to the casualty unit with epigastric discomfort, a huge abdominal swelling, vomiting, and absolute constipation of few days duration.



Abdominal ultrasound showed an intrauterine viable fetus of 18-20 weeks gestation and a 34cm big irregular degenerating uterine fibroid.



At laparotomy, a big mass measuring 32x30x16 cm was found originating from the uterine fundus, compressing small and large intestine. The extremely huge mass (8.9 kg) was removed and the estimated blood loss was 600 ml.

At 38 weeks, Caesarian section was performed because of placenta previa and the deformed uterus, giving birth to live healthy female baby (weight 3.5 kg). Hysterectomy was also done for uncontrolled blood loss. She remained well up to 20 weeks post-operative follow-up.

#### Graphical Abstract



**Figure 1:** The gravid uterus bellows the umbilicus and the huge pedunculated fibroid above making a visible sulcus at the level of the umbilicus

#### Case Presentation

A 38-years old primigravida (18-20 weeks gestation) presented to the casualty unit with epigastric discomfort, a huge abdominal swelling, vomiting, and absolute constipation of few days duration. She claimed that the abdominal swelling started as a small lump, and then it markedly increased in size over the last 6 weeks. It was associated with epigastric discomfort, pain, constipation, vomiting, weakness and legs swelling.

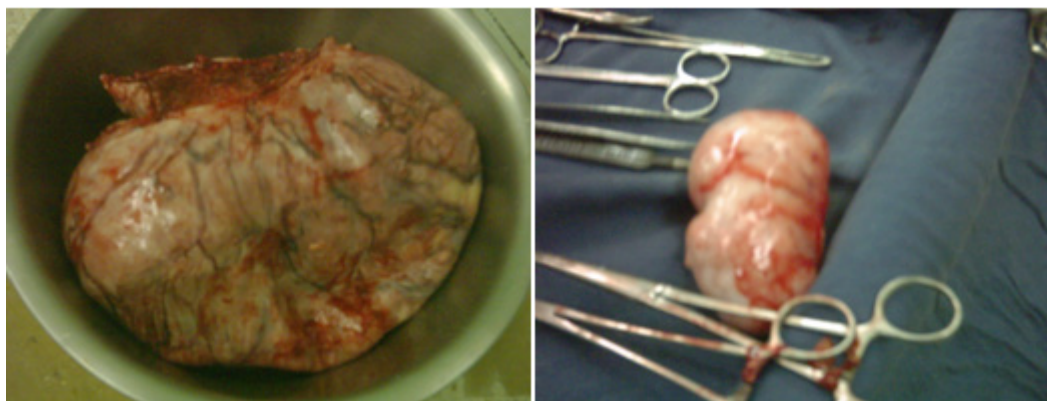
On examination, she was ill-looking, pale, with bilateral pitting edema. Her pulse was 96 beats/min, blood pressure was 110/70 mm Hg and respiratory rate was 26 breaths/min. The abdomen was grossly distended and tense. There was a huge irregular mass (about 30 x 30 cm) above the gravid uterus, firm in consistency, filling the upper abdomen, from the umbilicus to the xiphisternum (Figure 2). It was mildly tender, with no guarding or rebound

tenderness. Routine blood tests revealed normal renal panel and complete blood count showed hemoglobin of 9.2 g/dl, with a normal white cell count, differential count and ESR.

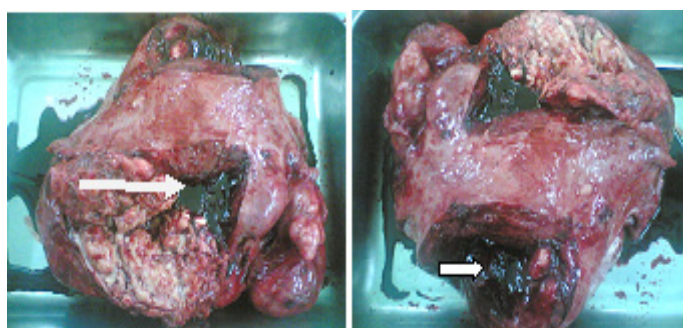
Abdominal ultrasound showed an intrauterine viable fetus of 18-20 weeks gestation and a 34 cm big irregular degenerating uterine fibroid co-existing with an intrauterine pregnancy. The fibroid was reaching the xiphisternum and free fluid in the peritoneal cavity was observed. Whole blood was given to correct her anaemia. Radiological studies were not done because of pregnancy. It is because of her vomiting, absolute constipation, and abdominal discomfort; she was prepared for laparotomy to remove that big fibroid and to relieve the gastrointestinal symptoms.

At laparotomy, large wound extending from the xiphisternum to the symphysis pubis was done. There were ascites, but normal solid organs and fallopian tubes. The uterus was firm in consistency with multiple small masses occupying its surface. A big mass measuring 32x30x16 cm was found originating from the uterine fundus, connected to it by a wide pedicle, and causing pressure on the adjacent small and large intestine bellow. The mass was carefully delivered outside the abdomen and removed with its pedicle, and the defect left at the fundus was covered with an omental patch. The estimated blood loss was 600 ml.

The excised tumor weighed 8.9 kg was sent for histopathology (Figure 3). Postoperatively, ritodrine drip was given to prevent uterine contractions. The post-operative period was complicated by a mild wound infection which was treated conservatively and she was discharged home on the



**Figure 2: The large 8.9 kg fibroid and its pedicle site (left), and small one was attached to the lateral right side of the uterus (right)**



**Figure 3: The site of the Caesarian section (short white arrow) and the site of excised multiple myomas (long arrow)**

7<sup>th</sup> postoperative day. The histopathological examination revealed an extremely huge (8.9 kg) uterine mass around 30x32x16 cm firm smooth outer surface with whorl cut section (Figure 2). Histopathological features consistent with benign leiomyoma with secondary changes in the form of degenerative changes and cystic central lesion. There was no malignancy seen in the sample examined.

Follow-up ultrasound during the antenatal period showed a normally growing fetus. At 38 weeks, Caesarian section was performed because of placenta previa and the deformed uterus, giving birth to live female baby (weight 3.5 kg, Apgar score 8 and 10 at 1 and 10 minutes, respectively). Hysterectomy was also done for uncontrolled blood loss from the abnormally situated placenta and the diseased uterus with a multiple lower segment myomas. She remained well at 20 Weeks follow-up.

## DISCUSSION

The prevalence of uterine leiomyoma during pregnancy is 2%.<sup>4</sup> They are usually asymptomatic, but may occasionally be complicated by red degeneration and an increased frequency of spontaneous abortion, preterm labour, premature rupture of fetal membranes, antepartum hemorrhages, malpresentation,

obstructed labour, caesarian section and postpartum hemorrhages.<sup>5</sup> The management of uterine myoma during pregnancy is largely expectant and its surgical removal is generally delayed until after delivery,<sup>6-7</sup> as the uterus is highly vascular during pregnancy, and women are at increased risk of bleeding and postoperative morbidity during myomectomy.<sup>5,8-9</sup> It has been reported that that myomectomy during caesarian section can be safe.<sup>10-11</sup> However, controversies exist among reports of myomectomy being performed during pregnancy. Some case series have reported the safety of antepartum myomectomy in carefully selected patients.<sup>4</sup> Also, large uterine fibroids can cause pressure effects which usually manifest itself on the urinary tract (distorting the bladder producing urinary frequency or paradoxically acute retention), ureters (causing hydroureters and hydronephrosis), rectum (causing tenesmus), and veins principally the left common iliac vein (causing varicosities, venous thromboembolism,<sup>12-13</sup> and leg edema). These problems are more likely with large fibroids and renal and venous obstruction are potentially life threatening. Women diagnosed with these problems need to have the fibroids removed to prevent permanent kidney damage or pulmonary embolism. Apart from the above, bowel obstruction can also occur rarely either because of adhesions and bowel entrapments between the pedicles or more rarely because of pressure symptoms.<sup>14</sup>

Huge fibroids are uncommon,<sup>15</sup> and giant fibroids (weight more than 11.4 kg) are even more uncommon.<sup>16</sup> The current case of huge myoma which weighs 8.9 kg causes a rare complication of intestinal obstruction. This complication was diagnosed during pregnancy and was managed successfully by antepartum myomectomy.

This case report supports other studies and previous case reports that had demonstrated the safety of myomectomy during pregnancy in special circumstances such as what is presented in this case; intestinal obstruction caused by

external compression by the big fibroid.

## CONCLUSION

A degenerating uterine fibroid may mimic an ovarian tumor in pregnancy. Obstetrician should be more careful of the differential diagnosis. Most cases of uterine fibroid in pregnancy can be managed conservatively. However, antepartum myomectomy may be necessary in selected cases because of their antenatal complications.

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## CONFLICTS OF INTEREST

Authors declared there is no Conflict of interest.

## Highlights of Paper

- Although most of text book and the researches advice to avoid myomectomy in pregnancy because of unpredictable blood loss during the operation and the subsequent risk of fetal loss and the increased risk of wound dehiscence with rupture of uterus due to growing fetus. Myomectomy was mandatory in our care due to emergency intestinal obstruction by huge fibroid.

## Author Profile



- **Dr Naghem Farouk:** Associate Professor, I am consultant in Obstetrics and Gynecology. I am also a Arab Board Fellow – Obstetrics and Gynecology (CABOG). I have also completed MD (O & G), MS (O & G), MB.Ch.B. I am coordinator for O &G for Faculty of Medicine, Universiti Sultan Zainal Abidin. My research interest is in risk factors in placenta abruption and prevalence of adenomyosis among postmenopausal women. I am also experience in clinical work and in laparoscopic gynecological operations.

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