

Case Report

Huge Uterine Fibroid in Pregnancy Managed with Caesarean Myomectomy: A Case Report

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Abstract

Uterine fibroids are the most common neoplasms affecting women with higher prevalence among women of African ancestry. Common surgical option for the treatment is myomectomy which may sometimes be done at caesarean section. Here, we report a case of a successful cesarean myomectomy for huge subserous fibroid. She was a 29-year-old primigravida who was referred to our facility at a gestational age of 14weeks and 2days on account of abdominal pain suggestive of red degeneration of fibroid in pregnancy. She required multiple admissions in pregnancy on account of recurrent iron deficiency anemia and abdominal pain from degenerative changes. She developed worsening dyspnea from mass effect of the fibroid and subsequently had urgent cesarean section at 35weeks with successful removal of the huge subserous fibroid. Caesarean myomectomy though controversial remains a safe option for the management of uterine fibroid in well selected cases.

Key words: Caesarean myomectomy, Fibroid in Pregnancy, Huge Fibroid, Anemia in Pregnancy, Red degeneration, Subserous Fibroid

Introduction

Uterine fibroid is a benign monoclonal tumor of the uterine smooth muscle that is common among women.¹ The risks of fibroid related pregnancy complications are of concern to both patients and obstetricians. Fortunately, only about 10-30% are associated with significant adverse outcomes.² Myomectomy can be performed at caesarean section (Caesarean myomectomy) by an experienced obstetrician, though should not be the primary indication for abdominal delivery in women with fibroid coexisting with pregnancy.^{3,4} Indication for myomectomy include lower segment fibroids which make uterine incision and repair challenging, and pedunculated sub-serous fibroid that is easily accessible.⁵ Massive haemorrhage with increased perioperative morbidity are dreaded complications.³ Although, some have suggested this avoids a second

surgery with its accompanying complications and cost implication.^{5,6} We present the case of a 29-year old primigravida with a huge uterine fibroid coexisting with pregnancy who subsequently had a caesarean myomectomy.

Case Presentation

Patient is a 29-year-old G1P0, referred to our facility at a gestational age (GA) of 14weeks and 2days. She presented with dull aching lower abdominal pains of 2weeks. She also had generalized weakness and easy fatigability since onset of pregnancy. She had background history of progressive abdominal swelling of 2-years duration. She had been offered myomectomy on account of diagnosis of uterine fibroids, but she declined due to fear of complications of surgery. On examination, she was pale and tachycardic

(pulse rate was 108beats/minutes). The symphysis-fundal height was 37cm which was much larger than expected for her gestational age. An assessment of uterine fibroid in pregnancy with degenerative changes was made. Abdomino-pelvic ultrasound scan revealed a bulky uterus containing a single gestational sac containing a live fetus. There were a 21cmx18.7cm highly vascularized postero-fundal and 6.4cm anterior sub serous fibroids. (Figure 1). Full blood count showed anemia with Packed Cell Volume (PCV)-22.1%; blood group was O Rhesus Negative. She was admitted, transfused with 2 units of blood, and was placed on analgesic and oral hematinics. She was discharged home after 5 days.



Figure 1- Abdominopelvic ultrasound in early second trimester

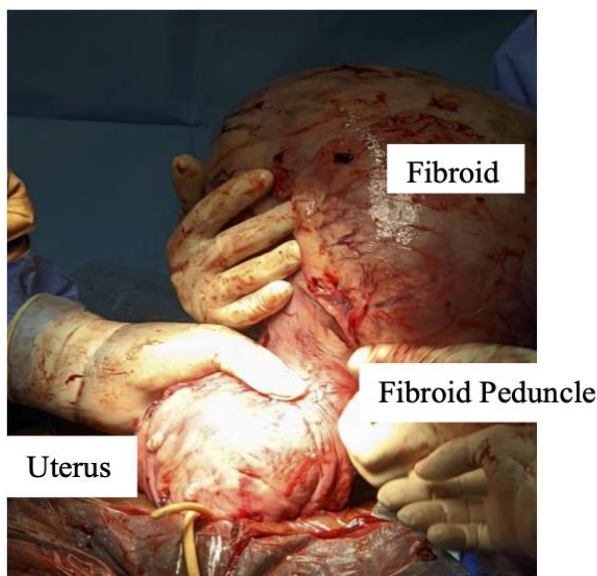


Figure 2-Uterus with huge fundal fibroid following delivery of the baby.

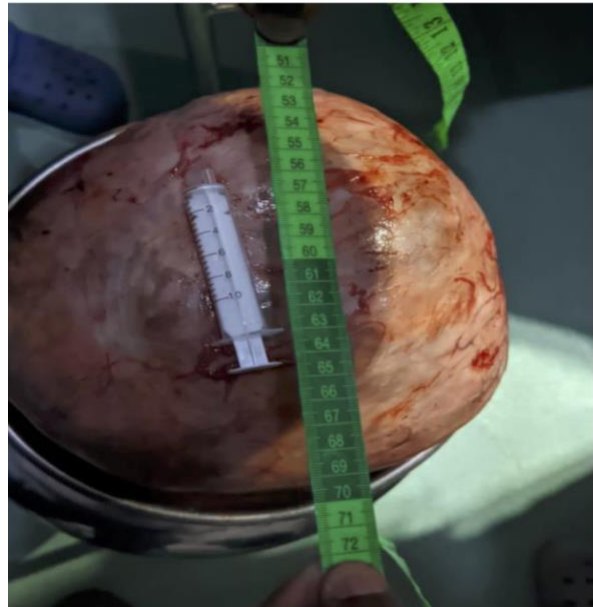


Figure 3-Dimension of the huge fibroid mass (17cmx16.5cm)

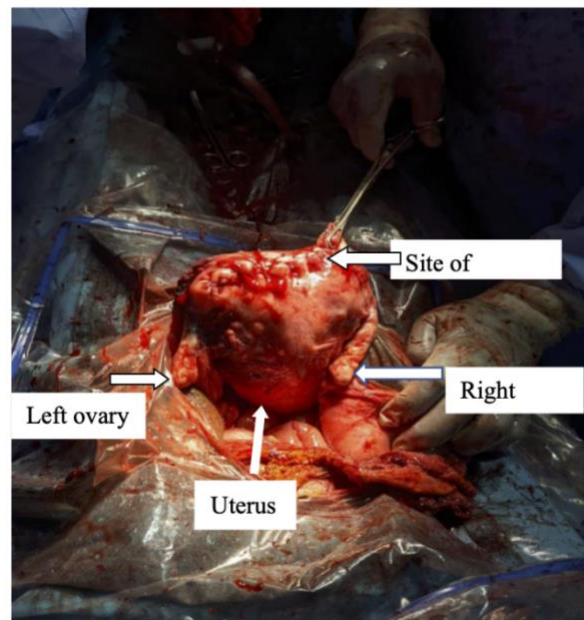


Figure 4-post caesarean myomectomy

She registered for antenatal care at a GA of 16weeks+5days with hematocrit of 25% and otherwise normal booking parameters. Anomaly scan at 20weeks was normal. At a GA of 22weeks, she was readmitted on account of anemia in pregnancy (PCV -22%). Iron studies suggested iron deficiency. She had oral iron supplements, and she was co-managed with the hematologist. She was transfused with 2 units of blood. Post transfusion PCV was 33% and she was discharged home after 8days. At 30weeks, she was readmitted again on account of anemia (PCV-24%)

in pregnancy. She was transfused with 2 units of blood and was commenced on thromboprophylaxis and antenatal corticosteroids. Antepartum fetal surveillance was commenced while she was on admission for bed rest.

She developed worsening dyspnoea and easy fatigability at 35 weeks. Abdominopelvic ultrasound scan showed a normal fetus in oblique lie and bilateral hydronephrosis was also noted. She had caesarean myomectomy done at 35 weeks + 3 days on account of this and she delivered a live female neonate with birth weight of 2.45 kg and Apgar Score of 9 at the first and fifth minutes. Oxytocics were given to prevent postpartum haemorrhage. Following the delivery of the fetus and placenta, the uterine incision was repaired. Thereafter, a tourniquet was applied at the cervico-isthmic junction on the uterus and a huge subserous fundal fibroid weighing 8.1 kg, measuring 17 cm X 16.5 cm was removed (Figures 2, 3 and 4). The uterine stump was repaired. Anterior abdominal wall was closed in layers. The estimated blood loss was 1500 ml.

She was transfused with 3 units of blood. The post transfusion PCV was 37%. Her postoperative recovery was satisfactory. The baby's blood group was O Rh D positive, hence, the patient had 1500 IU of anti-D immunoglobulin. Her medications were converted to oral on 2nd post-operative day. She was discharged home on the 4th day. The histology report showed uterine leiomyoma with degenerative changes. She was reviewed at 2 and 6 weeks at the post-natal clinic; both mother and baby were in satisfactory condition.

Discussion

Over 200 million women have symptomatic uterine fibroids globally with projected annual incidence of 10 million. It is estimated that 70-80% of women in the general population would develop uterine fibroids during their lifetime as the findings at hysterectomy have confirmed.⁷ Prevalence of symptomatic uterine fibroid in Nigeria has been reported to be 7-20%.^{8,9} One-quarter of cases of symptomatic uterine fibroids are seen in pregnant women.⁸

Uterine myomas may be classified by anatomic location and size. The International Federation of Obstetrics and Gynecology (FIGO) has adopted the anatomical description which are now numbered as grade 0 to grade 8.^{10,11} This patient's fibroid was Grade 7 which is the pedunculated sub-serous type. Different cut-offs have been adopted to describe large uterine fibroids such as 4 cm, 5 cm and 10 cm sizes or 750 cm³ by volume.¹²⁻¹⁵ By all standards, this patient had a huge massive fibroid.

Women with uterine fibroids in pregnancy may be twice at risk of adverse obstetric outcome compared to the general population.¹² Successful conception with coexisting

uterine fibroids may be associated with a higher risk of miscarriage.¹⁶ Other adverse obstetric outcomes reported to be associated with uterine fibroid in pregnancy include preterm delivery, abnormal lie, abnormal presentation, antepartum hemorrhage, abnormal placentation, postpartum hemorrhage etc.¹² This patient had a preterm delivery with the fetus in an abnormal lie. Uterine fibroid may undergo degeneration (commonly red degeneration in pregnancy resulting in acute pain).¹⁷ Although sub-serous myomas are known to be less risky, there have been reported cases of accidents such as spontaneous vascular rupture.¹⁸ Iron deficiency anemia may result from abnormal uterine bleeding prior to pregnancy and large fibroid size as it was the case here necessitating repeated transfusion with blood and treatment with iron supplement.¹⁹

Uterine fibroid coexisting with pregnancy is not an indication for caesarean section, yet women with uterine fibroid have a higher risk of caesarean section but more than half of them will go on to have normal vaginal deliveries.^{12,20} The patient discussed here had fetus in oblique lie and developed worsening dyspnea from the mass effect necessitating caesarean delivery at 35 weeks + 3. The safety of caesarean myomectomy has been debated severally with the greatest concern being risk of hemorrhage yet many studies have demonstrated the safety of caesarean myomectomy in well selected patients.²¹⁻²³ There may be increased blood loss at caesarean myomectomy as expected but the blood loss is not severe enough to result in mortality or severe morbidity in well selected cases.^{22,24} The findings at surgery suggested the safety of myomectomy. She was earlier counselled that possibility of caesarean myomectomy will be based on intraoperative finding. A tourniquet was applied at the cervico-isthmus junction after completing the caesarean delivery prior myomectomy and this may have limited blood loss.

Contrary to expectations, caesarean myomectomy may not significantly increase the operation time, the duration of hospital stay and the post-operative care as compared to women who had only caesarean section.²⁵ This patient had an uneventful recovery like a typical caesarean section.

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