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Case Report

Successful Myomectomy for Huge Symptomatic Uterine Fibroid in Early Pregnancy: A Case Report.

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Abstract

Although uterine fibroids usually remain asymptomatic during pregnancy, they may occasionally be associated with pregnancy complications requiring surgical intervention. We present a 31-year-old primigravida at 13 weeks gestation with a 5-year history of progressive abdominal swelling and a one-week history of abdominal pain and difficulty in breathing. Examination revealed a 42-week-sized uterus while ultrasound showed a huge pedunculated subserous fibroid. She subsequently had a successful myomectomy at 13 weeks gestation, an uneventful antenatal period afterwards and was delivered of a live female neonate via an elective caesarean section. Myomectomy during pregnancy in selected circumstances may be done to prevent adverse effects on the mother and/or foetus.

Keywords: uterine fibroids, pregnancy, myomectomy, caesarean section

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Introduction

Uterine fibroids are the most common benign tumour found in women of reproductive age.[1-3] The prevalence of uterine fibroids during pregnancy is estimated to be about 0.3-2.6% of which 10% result in pregnancy complications.[1,4] These complications include pregnancy loss, abdominal/pelvic pain, placental abruption, premature rupture of membranes, preterm labour, intrauterine growth restriction, hydronephrosis, foetal malpresentation and post-partum haemorrhage[1]. Other identified complications include retention of placenta, increased rates of abdominal delivery and hysterectomy.[5]

The management of uterine fibroids during pregnancy in most cases is expectant, and surgical intervention is generally delayed until after delivery.[1] However in rare circumstances surgical intervention such as a myomectomy may be required.[6] Myomectomy is generally avoided during pregnancy due to the high risk associated with this surgery such as severe haemorrhage (because of the

increased vascularization of the uterus during pregnancy) and other obstetric complications like pregnancy loss or injury, uterine rupture, pre-term labour, and risk of a hysterectomy.[1, 3, 7, 8]

This paper therefore presents a case of a huge symptomatic uterine fibroid at 13 weeks gestation who had a successful myomectomy and subsequently had an elective caesarean section at term with good feto-maternal outcome.

Case Presentation

A 31-year-old primigravida at 13 weeks gestation who presented with acomplaints of abdominal pain, difficulty with breathing and sleep disturbance.
Examination revealed a young lady in painful and respiratory distress as evidenced by flaring of her alar nasi and a respiratory rate of 26 cycles per minute. She was not pale or icteric and had no pedal oedema. Her pulse rate was 100 beats per minute and her blood pressure was 100/60mmHg. Her chest was clinically clear on auscultation and her symphysio-fundal height was 42cm. There was severe tenderness over the mass which prevented further abdominal examination. Abdominal pelvic ultrasound showed a viable single intrauterine fetus of about 14 weeks gestation coexisting with a huge subserous Antero-fundal pedunculated fibroid mass measuring about 24x 20x18cm. Her abdominal organs were normal.

Her laboratory results showed a packed cell volume of 30% with a white blood cell (WBC) count of 6200 cells /mm^3 and a platelet count of 198,000 cells/mm^3. Her serum electrolyte, urea, creatinine and urinalysis were within normal limits. She had two units of O Rhesus 'D' positive blood cross matched. She subsequently had a myomectomy under general anaesthesia with gentle handling of the uterus and the findings were that of a huge fundally sited fibroid mass that weighed 6.5kg, normal fallopian tubes and ovaries bilaterally with an estimated blood loss of 400mls. She received one unit of blood in the postoperative period following a packed cell volume of 26%. Postoperatively she had intravenous salbutamol infusion for tocolysis over 24 hours and continued with nifedipine tablets. She also had antibiotics, analgesics and progesterone (cyclogest) pessary.

She had an uneventful postoperative period and was discharged on the 7th postoperative day. Histology confirmed the diagnosis of uterine fibroids. Her antenatal period remained uneventful and at term, she had an elective caesarean section at 39 weeks gestation. She was delivered of a live female neonate that weighed 3.2kg with a good APGAR score. She was then discharged on the 8th postoperative day. She expressed satisfaction with her treatment and had no complaints during her six weeks post-natal visit.

Discussion

This case report shows that uterine fibroids though usually asymptomatic can become symptomatic in pregnancy and even make a myomectomy inevitable. Myomectomy during pregnancy is usually reserved for only cases with unresolved symptoms that fail to respond to conservative management and/or when such patients are unwilling to undergo termination of pregnancy[8, 9]. The sociodemographic features of the patient under review, a 31-year-old primigravida with a huge symptomatic uterine fibroid complicating early pregnancy are similar to the works of other authors[1, 4, 6-8] that reported similar findings mainly in elderly primigravida. Nigeria like most black African countries have a higher preponderance of developing uterine fibroids.[8, 10] Several mechanisms ranging from genetic predisposition, diet, and environmental factors amongst others have been proposed for the greater incidence and size of uterine fibroids in blacks than whites.[10] Due to the financial implications of surgeries, poor health-seeking behaviour as well and the fear of surgery, most of these patients do not subscribe to a myomectomy prior to pregnancy.[8] This calls for the need to develop proficiency in the management of such obstetrics situations requiring surgical intervention with the aim of improving pregnancy outcomes.[8]

Abdominal pain has been identified by most authors as the commonest presentation of uterine fibroids in pregnancy.[1, 3, 5, 8, 11] This was also the case in our patient who presented with abdominal pain alongside difficulty in breathing and sleep disturbance most likely due to the pressure effect of the huge fibroid mass on the diaphragm. The pain usually experienced may be due to torsion of a pedunculated subserous fibroid or from fibroid red degeneration.[8] The patient under review had a solitary huge uterine fibroid which was not torsed. Other symptoms these patients could present with include bleeding per vagina, pressure symptoms and fever,[3, 8] while in some others, a huge mass is just palpated on examination and confirmed on ultrasound without any symptoms.

For cases not amenable to conservative medical management, myomectomy may be offered electively with the aim of preserving the pregnancy.[8] While some researchers have suggested delaying this surgery till the second trimester of pregnancy to reduce the risk of fetal loss, others have suggested that a delay in intervention may result in pregnancy complications such as spontaneous miscarriage, abdominal pains, pre-term labour, premature rupture of membrane, antepartum bleeding, placental abruption, intrauterine growth restriction, foetal postural deformities, hydronephrosis, pressure effect on the adjacent organs, red degeneration of fibroids, ruptured degenerated fibroids and torsioned pedunculated fibroids.[8] Myomectomy was offered to the patient under review irrespective of her gestational age of 13 weeks based on her symptomatology after confirming a viable fetus on ultrasound.

During surgery, emphasis is placed on careful and minimal handling of the gravid uterus, with the removal of intramural and sub-serous fibroids within reach through minimal incision, care to avoid the uterine cavity is also exercised. These were observed for our patient. Also, the solitary pedunculated subserosal fibroid location of the fibroid may have accounted for the ease of enucleation of the fibroid and the overall success of the procedure.

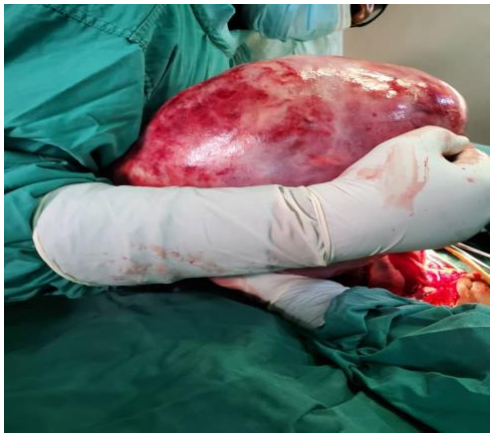

Figure 1: Delivery of the huge pedunculated fibroid mass from the abdominal cavity

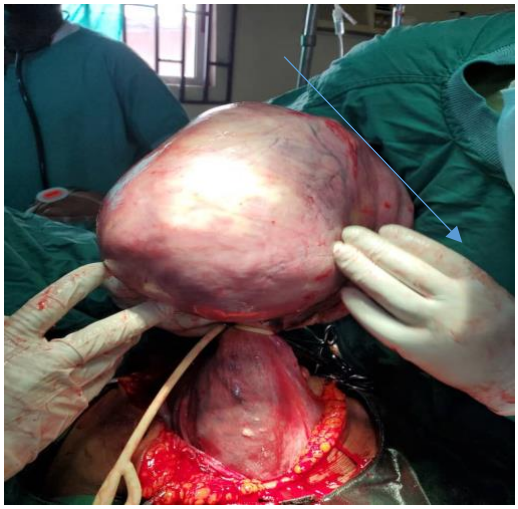

Figure 2: The huge fibroid mass and the gravid uterus before myomectomy

In the immediate postoperative period, the use of tocolytics, antibiotics, analgesics and progesterone have been reported to be effective in managing this group of patients.[1, 4, 8, 11] These were also used in the post-operative management of our patient. The use of progesterone has been shown to help in luteal phase support and prevent preterm contractions and cervical effacement.[8, 12] Our patient had routine antenatal care subsequently with a successful elective caesarean section at term with good foeto-maternal outcome as have been reported by other authors.[1, 4-9]

Conclusion

As many women these days delay conception for many reasons ranging from education, and career advancement amongst others, the probability of conceiving with a fibroid is thus high and may become symptomatic to warrant a myomectomy in pregnancy. This surgical intervention may now be safer than previously thought in well-selected cases. Good case selection, patient optimization, adherence to surgical principles of good exposure, minimal incisions and uterine handling, and speed during surgery with meticulous closure of myoma beds ensuring haemostasis in addition to encompassing post-operative care can be effective in ensuring a good feto-maternal outcome.

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