

Myomectomy During Early Pregnancy (Case report)

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Abstract

Myoma is a common benign uterine tumor; therefore it is common in pregnancy. One in ten women will have complications related to myoma in pregnancy. Few treatment options are available during pregnancy, conservative treatment with analgesia, reassurance and supportive therapy is almost always adequate but in carefully selected patients, myomectomy has been performed successfully without jeopardizing pregnancy outcome. The usual indications for surgery during pregnancy include torsion of pedunculated uterine myoma and obstructed labor, surgical

intervention during pregnancy is occasionally necessary in uncommon cases of intractable pain.

19 years old lady presented with intractable lower abdominal pain during pregnancy. Ultrasound showed fetus of 18 weeks gestation and ovarian cyst. The pain did not respond to rest and sedation, so emergency exploration laparotomy was done; incarcerated intramural uterine myoma was the cause of the pain, it was enucleated successfully through myomectomy and the pregnancy progressed normally.

Keywords: Pregnancy, uterine fibroid, myomectomy.

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Introduction

Uterine fibroids are the most common benign tumors in women, occurring in approximately 20% to 30% of women of reproductive age ⁽¹⁾. They are therefore common in pregnancy. The true incidence of fibroids during pregnancy is, however, unknown, but Kessler et al ⁽²⁾ stated that the incidence of myoma associated with pregnancy is reported to vary between 0.3% and 2.6%. Although leiomyomas usually remain asymptomatic during pregnancy, they may complicate its course, Katz et al ⁽³⁾ found that 10% to 30% of these women will present with some form of complication during pregnancy. These include first trimester losses, pressure symptoms caused by the myoma on the mother and fetus, pain of 'red degeneration', premature labor, premature rupture of membranes, malpresentation, retained placenta, postpartum hemorrhage and uterine torsion ⁽⁴⁾. The size, location, number of fibroids and their relation to the placenta are critical factors. Ultrasound scanning plays a central role in diagnosing and monitoring fibroids during pregnancy and in determining the relative position of the fibroids to the placenta. So pregnant women with myoma should undergo frequent ultrasound evaluation during pregnancy in order to monitor both fetal growth and myoma size. Few treatment options are available during pregnancy which is usually conservative. A successful pregnancy and delivery is common with appropriate surveillance and supportive management.

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 hours of therapy, then surgical intervention must be considered ^(5,6). There are two basic complications of myomectomy during pregnancy: abortion and hemorrhage.

Case Report

In June 2004 a 19 years old lady presented to the casualty as a case of severe lower abdominal pain with pregnancy, she was primigravid in her mid trimester she was eighteen weeks pregnant and gave a history of discomfort through all this period of pregnancy but she started to have severe lower abdominal pain in the last two days associated with loin pain and vomiting, she didn't have vaginal bleeding and gave no history of infertility or trauma or any drug ingestion.

On examination she was in pain, restless, pale but not anemic her pulse rate was 100 beats/ minute, blood pressure was 90/ 40 the temperature was normal, chest and breast examination were normal, abdominal examination revealed a mass occupying the lower abdomen below the umbilicus it was very tender, bowel sounds were positive, fetal heart was positive, no palpable lymph nodes.

On vaginal examination we could not differentiate the mass from the pregnant uterus because of the pain; there was no leg edema or varicose veins.

We did an ultrasound for the abdomen which showed fetus of 18 weeks gestation, fetal heart was positive; the uterus was shifted to the left with an ovarian cyst of 6 by 8 cm in the right side, no intra peritoneal fluid, and the right

kidney showed mild hydronephrosis. Hemoglobin level was 12gm/dl, general urine examination showed moderate infection.

The decision was to resuscitate the patient and observe her for the next few hours. we started antibiotics, but her pain was exacerbated and her pulse rate and blood pressure didn't change, the temperature started to rise. Because of this severe pain which was not relieved by medical treatment and the anxious family we decided to do laparotomy for her. Laparotomy was performed under general endotracheal anesthesia using a midline incision; the pregnant uterus was shifted to the left because of uterine myoma originating transversely from the myometrium in the right side of the lower segment of the uterus just above the level of the internal os, it was incarcerated between the uterus and the pelvic wall, there was no ovarian cyst, manipulation of the myoma was impossible there was no degenerative changes in the myoma so the decision was to remove the fibroid because there was no chance of leaving it, a vertical incision was made over the myoma using blunt and sharp dissection enucleation of the myoma was easily done it was completely removed with out causing serious bleeding or any injury to the uterus or the fetus, following removal of leiomyoma, homeostasis was carefully carried out using sutures, the myometrium closed with two layers of interrupted sutures using atraumatic needle, catgut sutures. The patient recovered smoothly from anesthesia.

Fetal monitoring (using ultrasonography) was carried out immediately after surgery to evaluate fetal viability. The patient received uterine relaxants for 4 days, and was discharged on post-operative day seven. Post-operatively, the patient was followed-up using ultrasonography at 2-week intervals till her 40 weeks gestation where elective cesarean section done for fresh previous myomectomy. Alive normal female delivered its weight was 2.900 kg, Apgar score at 1 minute was 7, no operative or postoperative complications were faced.

DISCUSSION

Controversy persists among reports of myomectomy being performed during pregnancy. The management of uterine leiomyoma during pregnancy is largely expectant and its surgical removal is generally delayed until after delivery⁽⁷⁾. The medical literature has reported an increase in myomectomy during caesarean section in the past decade. However, myomectomy performed during pregnancy

remains a rarity. Myomas during pregnancy must be evaluated carefully, especially in relation to possible premature delivery or spontaneous miscarriage.

The surgical management of uterine leiomyomas during pregnancy may be performed successfully in carefully selected patients, and this seems to lead to an improvement in pregnancy outcome.

Although myomectomy in either the second or early third trimester has been described⁽⁸⁾ it is generally felt that it would be safer and more easily performed some months after delivery as an interval procedure. Mortality and morbidity are slightly higher in myomectomy in the gravid uterus as compared to non-gravid uterus⁽⁴⁾. There is increased vascularity of the gravid uterus, thus myomectomy performed in pregnancy has been reported to be associated with greater risk of hemorrhage and the need for blood transfusion⁽⁹⁾. Additional to the general risks of myomectomy is the risk of abortion which occurs in 18% to 35% of cases⁽⁸⁾. An incomplete abortion may also result in severe endometritis especially if a communication channel to the recently enucleated fibroid bed is present⁽⁴⁾.

Our case was 19 years old lady presented to us in her first pregnancy at 18 weeks gestation as a case of intractable abdominal pain with pregnancy, complicated ovarian cyst was the provisional diagnosis but during laparotomy uterine fibroid in the lower segment of six by eight cm was the cause of this pain it was incarcerated between the uterus and the pelvic wall, the decision to enucleate the myoma was very critical due to the fear from uncontrolled bleeding and the possibility of fetal loss, but the case was successfully managed by antepartum myomectomy.

No prospective controlled study of myomectomy during pregnancy has to the best of our knowledge been published and there are only a few retrospective case studies available. A reported myomectomy during early pregnancy was in women from Latin America⁽¹⁰⁾ presented with progressively worsening lower abdominal pain, needed laparotomy at 15 weeks gestation a pedunculated myoma showing degenerative changes in the fundus of the uterus was excised successfully and the pregnancy progressed normally. Other myomectomies from Singapore were during cesarean section⁽¹¹⁾.

The usual complication of myoma in pregnancy is red degeneration it causes severe pain, vomiting and fever; this complication rarely needs operative interference. But in our case the problem was in the position of the myoma which was incarcerated between the uterus and the

pelvic wall, no degenerative changes seen in this myoma. Myerscough⁽⁴⁾ found that enucleation of the fibroid is technically easier in the gravid uterus owing to the greater 'looseness' of the capsule. This was obvious during enucleation of the myoma in our patient.

Such an operation should only be carried out with optimal anesthetic facilities and by an experienced surgeon who has already had extensive experience in interval myomectomy as he may on occasion be confronted by considerable blood loss. Sufficient grouped and matched blood must be made available along with prophylactic broad spectrum antibiotics to combat infection.

However myomectomy is generally not considered to be indicated to prevent pregnancy complications except for women with a history of myoma-related complications. In pregnancies with myomas, preserving the pregnancy is one goal but different risk factors have to be taken into account at the same time.

Conclusion

From this report we conclude that 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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