

Myoma Complicating Pregnancy A report of two cases

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Abstract:

Background: Myoma complicating pregnancy is a high risk pregnancy which may lead to complication with unequal gravity. Its prevalence during pregnancy has been reported to be 1-4 %. Uterine fibroids have long been implicated as a cause of adverse pregnancy events like spontaneous abortion, premature labour, soft tissue dystocia, Uterine inertia, fetopelvic disproportion, malposition of fetus, retention of the placenta, postpartum hemorrhage, pain, degeneration, placental abruption, intrauterine growth restriction. Although fibroids are associated with increased complications during pregnancy, Careful surveillance during pregnancy and labour is associated with good maternal and fetal outcome. Here we are presenting two cases of myoma complicating pregnancy which were managed successfully without any adverse maternal and fetal outcome. **Case report:** Case 1: A 21 years primigravida with eight weeks gestation approached us for MTP as she was told of large fibroid uterus complicating pregnancy with short cervix. On examination the lady was found to be hypothyroid, hence put on Eltroxin in consultation with endocrinologist and advised to review after two weeks for follow-up. Meanwhile she was advised complete bed rest and put on natural progestones. Follow up scan showed adequate length of cervix hence deferred cervical encirclage and put on regular followup. Antenatal period was uneventful except occasional tightening of uterus, treated with tocolytics. Elective LSCS was done at 38 weeks gestation for the indication of large fibroid 12X8 cm in the lower segment of the uterus with floating head. Delivered alive male child of about 3.00 kg with good APGAR. No complications during and after the surgery, patient discharged in a good condition to home after 7 days of hospital stay. Case 2: A 24 years multi gravida G₂P₁L₁ with full term with previous cesarean section (indication: fibroid uterus) reported to labour room with labour pains. It was an unbooked case without any regular antenatal checkups. Her vitals were normal and emergency LSCS was done in view of postcaesarean section pregnancy with fibroid complicating. Delivered a healthy female child of 3.2 kg. No complications encountered during surgery. Bilateral tubectomy was done. A fibroid of 10X7 cm noticed in the lower segment on posterior wall. No post operative complications encountered. Mother & baby discharged home after seven days of hospital stay. **Conclusion:** Uterine fibroids have long been implicated as a cause of adverse pregnancy events. Although fibroids are associated with increased complications during pregnancy, management is recommended. Prophylactic intervention is seldom warranted and that surveillance during pregnancy with a referral to an obstetrician is sufficient for most women who are found to have fibroids. Fibroids during pregnancy are associated with increase in caesarian section due to high incidence of dysfunctional labour and malpresentation. Fibroids lying over the lower segment may prove a challenge at the time of caesarean birth and the obstetrician dealing with such patients should be well experienced to deal with any untoward events during management.

Keywords: Fibroid, leiomyoma, pregnancy

I. Introduction

Uterine leiomyomata are benign smooth muscle tumors of the uterus¹. They are present in approximately 20-50 % of women of reproductive age². But the actual prevalence of uterine fibroid tumors is found to be as high as 80 % when the pathological examinations of removed uterus was done³. Presence of myoma during pregnancy is potentially a serious problem and of frequent clinical concern since fibroids are commonly detected in women of reproduction age⁵, and have long been implicated as a cause of adverse pregnancy outcome. The incidence of leiomyomata during pregnancy is approximately 2 % and the cited range depends on the frequency of routine sonography and population characteristics. The stimulatory effects of pregnancy on myoma growth are unpredictable and can be impressive. These tumors respond differently in individual women and may grow, regress or remain unchanged in size during pregnancy. Though in some cases it does not affect the outcome of pregnancy majority are associated with complications like abortion, Preterm labour, IUGR, PROM, Placental abruption, uterine dysfunction and obstructed labour^{6,7}. So careful monitoring

of the patient is needed during antenatal, intranatal and postnatal period. Here we are reporting two cases of myoma complicating pregnancy without any adverse maternal and fetal outcome.

II. Case report:

Case I: A 21 years primigravida with 38 weeks gestation with fibroid complicating pregnancy with hypothyroidism under control with Tab Eltroan 50 micro grams/day was a booked case with having regular antenatal checkups with frequent ultrasound examinations of gravid uterus. She had no antenatal complications except occasional pain & tightening of uterus, treated with bed rest. Inj. Hydroxy progesterone caproate 500 mg every 15 days upto 24 weeks and with tocolytics there after till term. Admitted at 38 weeks of gestation for Elective LSCS. At the time of admission her vitals were normal, BP was 130/80 mm Hg. TSH was within normal limits. Ultra sound examination of the Uterus revealed single live fetus in cephalic presentation of 38 weeks gestation of estimated fetal weight 3.5 kg with fibroid of 12 X 8 cm on the antiolateral aspect towards right side (figure 1&2). Per abdominal examination: abdomen was over distended, uterus was term cephalic, LOT with head 4/5th palpable and uterus was relaxed, FHS was good. Local examinations EGH, on per vaginal examinations cervix was uneffaced and OS was closed and presenting part was vertex and was high up. Pelvis was gynecoid.

Figure: 1 Fetus with fibroid



Figure 2: Fibroid



Management: Primary Emergency LSCS was done under Spinal anesthesia. J shaped incision was given towards left as fibroid was occupying the right side, and delivered a live healthy male baby of 3.0 kg. No PPH, no extension of incision, uterus closed in two layers. A fibroid of 12X8 cm seen in the lower segment on right side (figure 3), No postoperative complications. Patient discharged home after seven days of hospital stay in a good condition.

Figure: 3



Figure :4



Case II: A 24 years unbooked multigravida is a G₂P₁L₁ with full term pregnancy with previous LSCS admitted in labour room with complaints of labour pains. By history the lady was not having regular antenatal checkups and caesarian section for the first pregnancy was done because of fibroid complicating pregnancy. No complications were encountered during first pregnancy. Now the patient was stable. BP 110/80 mm Hg. Per abdominal examination uterus was term cephalic LOT, head 3/5th palpable. FHS was good, uterus was relaxed and there was no scar tenderness. Local examinations external genitalia were healthy, Cervix was uneffaced and OS closed, PP was high up. Repeat emergency LSCS was done in view of post C/S pregnancy with fibroid complicating. Delivered a live female child of 3.2 kg with good apgar and uterus was sutured effectively. A

fibroid of 10X7 cm was noticed in the lower segment on the posterior wall (figure 4). There was no PPH, bilateral tubectomy was done. Post Operative period was uneventful and patient was discharged on 7th post operative day in a good condition.

III. Discussion

The effect of uterine fibroids on fecundity and pregnancy outcome is difficult to determine with any degree of accuracy, this is due in large part to the lack of adequate clinical trials¹. The potential effects of these tumors on pregnancy and that of pregnancy on the tumors are frequent clinical concern since fibroids are commonly detected in women of reproductive age⁵. Uterine fibroids have long been implicated as a cause of adverse pregnancy events¹. Though in some cases it does not affect the outcome of pregnancy, in many cases it leads to problems like abortion, preterm labour, other complications being premature rupture of membranes, placental abruption, uterine dysfunction and obstructed labour, mal presentations and mal positions, retained placenta, post-partum hemorrhage, pain, degeneration, IUGR⁶⁻⁸. The two factors most important on determining morbidity in pregnancy are leiomyoma size and location. The proximity of myoma to the placental implantation site is also a factor. Specifically abortion, preterm labour, placental abruption and post partum hemorrhage all are increased if the placenta is adjacent or implanted over a leiomyoma. Common causes for spontaneous abortion are disturbances in blood flow, alterations in blood supply to the endometrium, uterine irritability, rapid growth or degeneration of leiomyoma. Poor placentation and mechanical obstruction to fetal growth account for pregnancy loss (abortion, preterm delivery, still birth) and IUGR.

Generally fibroids are associated with multiparity and infertility. The relative risk of fibroids decreases with each additional term pregnancy, the risk is reduced to 1/5th, with five term pregnancies compared with nulliparous women¹². Women with fibroids have had fewer term pregnancies and are of lower parity than their contemporaries without this problem.

Mechanical difficulties due to the site of fibroids may be encountered during labour and fibroids may be associated with malpresentation of the fetus. There is a fourfold increase of placental abruption and breech presentation, two fold increase of first trimester bleeding and dysfunctional labour¹² and sixfold increase of caesarean delivery. The rate of caesarean section was 38-72.7 %^{5,8,12} and the indications for caesarean section being failure to progress, fetal distress and malpresentation, (Breech-19.04%, Neglected shoulder presentation 4.76%, cord prolapse 14.28%). If caesarean section is indicated myomas should be generally left alone unless they cause recalcitrant bleeding. It is unwise to attempt myomectomy because of associated vascularity of the procedure. Fibroids lying over the lower segment may prove a challenge at the time of caesarean section. Regarding preconceptual myomectomy there is inadequate data to support. During pregnancy, myomectomy is contra indicated unless there is intractable pain and is safe when done in 1st and 2nd trimesters and showed lower rates of spontaneous abortion and preterm birth and puerpal hysterectomy but higher rates of caesarean section. During intrapartum period elective myomectomy is strongly discouraged due to increased risk of hemorrhage, unless the presence of fibroid making adequate closure of the uterine incision impossible. Caesarean hysterectomy may be considered if there are multiple fibroids and the women has completed her family but is associated with increased morbidity and reserved for emergency situations only.

Incidence of postpartum hemorrhage is high and is due to decrease of force of uterine contractions because of fibroids in myometrium or because of disruption of the coordinated spread of contractile wave, there by leading to dysfunctional labour.

Fibroids have been associated with various complications during pregnancy. They may increase in size, undergo degeneration or torsion. Most fibroids remain uncomplicated and do not increase in size. Up to 10% undergo degeneration typically in the second trimester and is usually a self limiting process, occasionally requiring bed rest, adequate hydration and analgesia. The variation in size of fibroid is due to increase in progesterone level during pregnancy which actually may decrease apparent fibroid size. Rarely retention of urine and torsion of uterus can occur. Risk of postpartum sepsis may be increased because of extensive necrotic degeneration of fibroid attributed to hormonal changes of pregnancy and the puerperium.

Fibroids are associated with increase in perinatal mortality when placenta is implanted over the fibroid or close to the fibroid. There is increased incidence of spontaneous pregnancy loss⁸, particularly with multiple fibroids¹¹.

IV. Conclusion

Although fibroids are associated with increased complications during pregnancy, overall good maternal and neonatal outcomes are expected. Prophylactic intervention is seldom warranted and that surveillance during pregnancy with a referral to obstetrician is sufficient for most women with myomas. As fibroid during pregnancy are associated with increase caesarian section rate & post partum hemorrhage, the obstetrician dealing with such patients must be experienced to deal with any untoward events during management.

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