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Case Report

A case report on caesarean myomectomy

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ABSTRACT

Routine myomectomy at the time of caesarean section has been condemned in the past due to fear of uncontrolled haemorrhage and peripartum hysterectomy. It is still a topic of debate worldwide. However, in recent years, many case studies of caesarean myomectomy have been published validating its safety without any significant complications like excessive blood loss. We describe the case of a 23-year-old nulliparous women at 38 weeks of pregnancy with history of previous abortion. Her ultrasound was suggestive of singleton live intrauterine pregnancy with multiple intramurals and subserosal uterine fibroids seen in fundus, body region, posterior and anterior myometrium with largest fibroid of size 9×6.1 cm. The patient was taken up for elective caesarean section along with caesarean myomectomy. Live baby was delivered and successful myomectomy was done. Prophylactically oxytocin drip was given and intra myometrial carboprost was given to avoid blood loss. Patient was discharged on post-operative day 12 without any complications. Routine myomectomy at the time of caesarean section is not a standard procedure. However, it may be considered a safe option in carefully selected cases in the hands of an experienced obstetrician.

Keywords: Myomectomy, Caesarean, Postpartum hemorrhage, Carboprost, Fibroid

INTRODUCTION

Uterine leiomyomas are the most common benign tumors of the uterus occurring in the women of middle age group after 35 years.¹ With increasing incidence of delayed child-bearing in advancing age. There have been rising trends of pregnancy complicated with fibroid.² The exact incidence in pregnancy is not known. However, literature reports a prevalence of 2-4%.³

Moreover, the increase in rate of caesarean section also has led to increased confrontation of myomas during caesarean delivery by obstetrician.⁴ Fibroid complicates pregnancy by posing a higher risk of abortion, second trimester loss, preterm birth, mal-presentation, and caesarean section.⁵ The removal of myoma during CS is controversial as there is lack of consensus.

Myomectomy during caesarean section is routinely avoided due to increased vascularity of the gravid uterus leading to massive haemorrhage, unnecessary obstetric

hysterectomy and increased perioperative morbidity and mortality.⁶

However, with recent advancements in modern institutes like easy availability of blood product, selective devascularization techniques and careful pre-operative planning, caesarean myomectomy can safely be done successfully, thereby saving the patient from future morbidity of multiple surgery, anaesthetic complications plus financial burden.

We, here, present a case report of caesarean myomectomy.

CASE REPORT

23-year-old nulliparous women with previous one abortion presented with 7 weeks history of amenorrhea. In physical examination, she had a uterus of 18-20-week size and ultrasound examination of the abdomen showed multiple myoma, largest measuring ~7 cm rest of size ~1 cm.¹⁰⁻¹²



Figure 1: USG showing fibroids in uterus.

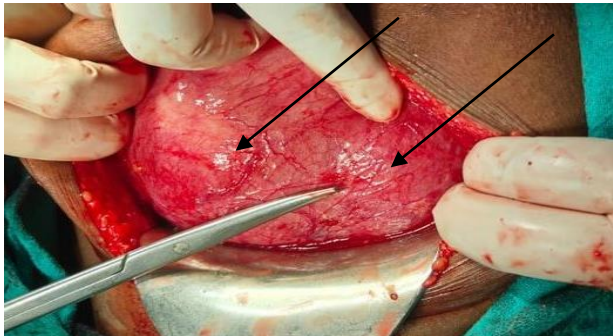


Figure 2: Arrow showing fibroids on opening of abdomen.



Figure 3: Delivery of placenta after upper segment caesarean section.

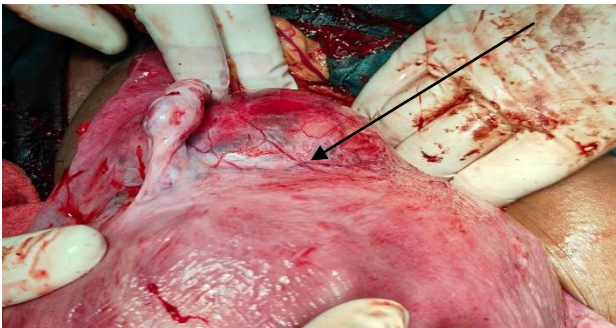


Figure 4: Arrow showing fibroid on round ligament.

She didn't have any symptoms related to the myoma such as abnormal uterine bleeding or pain, before pregnancy and also there were no complications during early

pregnancy. In later half of pregnancy patient had on and off pain in lower abdomen for which tocolytic agent was given.

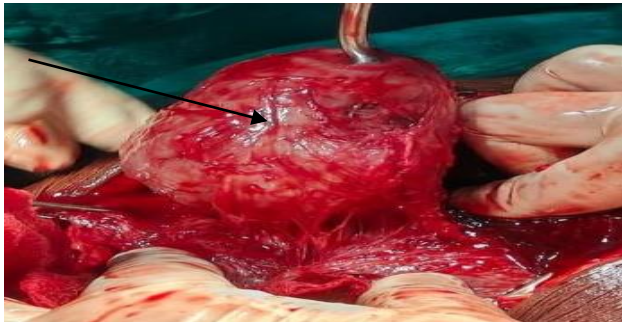


Figure 5: Intramural fibroid.



Figure 6: Intramural fibroid of 7x8 cm on antero-lateral wall of uterus.

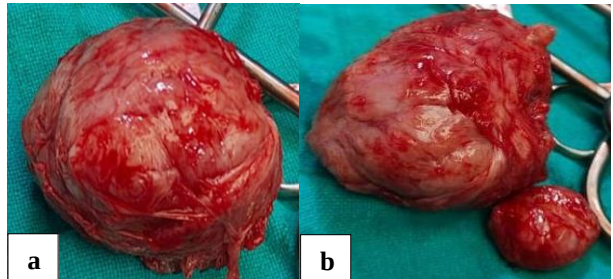


Figure 7 (a and b): Fibroids after retrieval.



Figure 8: Uterus after closure.

In serial sonographic studies, the size of myoma was increasing and according to the last USG report.

Around 10-12 myomas were present, among them three large myomas measuring ~7.6×5.7 cm, 7.1×6.2 cm and 9.0×6.1 cm, occupying the anterior, left anterior and right lateral myometrium respectively, intramural and subserosal type, present in the lower part of the body of the uterus and lower uterine segment.

The weight of foetus was below 3rd percentile of normal growth curve. Uterine surface was irregular. As she was having off and on pain abdomen, therefore elective caesarean section planned to avoid any emergency situation.

After consultation with anaesthesiologist, the caesarean section was performed.

The abdomen was opened with midline vertical incision. After pushing down the bladder, transverse incision was given on the lower part of the body of the uterus and upper segment caesarean section was done, as lower segment was not accessible.

After rupture of amniotic sac, a male baby of 2230 gm. in weight was delivered with difficulty as it was in breech presentation. The Apgar score of new-borns was 7 at the first minute and 8 after 5minute. After the baby was delivered, uterus was exteriorized to facilitate exploration. After removal of placenta high dose oxytocin (30 IU/1000 cc Ringer lactate) was commenced. Then we waited for the uterus to contract and proceeded with myomectomy. Four large fibroids were detected along with multiple seedlings, 2 myomas of size ~6×7 cm in lower segment were removed and a fibroid of ~3×3 cm from posterior wall, the body of uterus were also removed. Another fibroids of ~7×8 cm seen in the broad ligament of either side (both right and left), which were left in situ due to the risk of massive haemorrhage.

Myoma bed was closed with vicryl no. 2-0 in layers and, lower and upper uterine flaps were stitched carefully using vicryl no. 1-0 suture.

During the procedure of myomectomy, infusion of oxytocin which was started and was continued for 4hr of post-op period.

The amount of haemorrhage was almost 1000 cc, as that of any caesarean section, which was compensated with 2 unit packed red blood cell.

The duration of operation was 60 minutes, and haemoglobin level was 12.3 gm/dl before and 9.8 gm/dl after surgery.

The histological examinations confirmed the diagnosis of leiomyoma.

The patient was discharged on post-op day 10, after total stitch removal.

Follow-up was done at 6-week post-partum, both mother and baby were healthy.

DISCUSSION

This case showed that myomectomy during caesarean section may not be as dangerous as we feared upon. With proper training and skill, caesarean myomectomy could be a better option.

With large myoma in lower segment of uterus, myomectomy may be inevitable and there appears to be no absolute contradiction to myomectomy.

Whereas small fibroid ≤5 cm and single, myomectomy during caesarean section probably is not indicated especially when it is asymptomatic.

With an adequate training and experience in myomectomy during caesarean section and use of high dose oxytocin infusion, severe haemorrhage which is the most serious complications can be controlled or avoided.

Waleed et al in their retrospective cohort study to evaluate the value of myomectomy during caesarean section also found that there is no significant difference in the maternal and perinatal outcome and amount of blood transfusion and post-op haemoglobin level.⁷

Mehmet et al also did retrospective study in 361 patients, divided and compared them into two group, one had caesarean section with and other had caesarean without myomectomy, and found that reduction in haemoglobin level, rate of complications, and number of transfusions were similar in both groups.⁸

Again, a meta-analysis and systematic review was performed by, Goyal et al which included 17 studies with 6545 women, also not found any significant difference in increased operative time, blood loss and hospital stay.⁹

Therefore, it is said that, caesarean myomectomy should be preferred over caesarean section alone in patient with large, multiple symptomatic fibroid cases especially by experienced surgeons with appropriate haemostatic techniques and tertiary care centre.

CONCLUSION

So, recent studies and existing evidence from present studies indicates no difference in maternal morbidity and rate of complications associated with caesarean myomectomy. However, caesarean myomectomy is associated with increased blood loss during surgery, more requirement of blood transfusion and lengthier hospital stay but still it can be considered a feasible option, and should be performed rather than leaving for next setting.

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Ethical approval: Not required

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