

## Original Article

# Caesarean Myomectomy - A Case Study

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### Abstract

Leiomyoma is the commonly encountered benign tumor in women of reproductive age group. Caesarean myomectomy has traditionally been discouraged due to fear of intractable hemorrhage and increased postoperative morbidity. However, a number of authors have recently shown that myomectomy during the caesarean section did not increase the risk of hemorrhage and post-operative morbidity.

A 34 years old lady of 3<sup>rd</sup> gravida and para- one with history of one abortion, was admitted in the obstetrics and gynecology department of Ad-din Women's medical College & hospital (AWMCH) with the complaint of amenorrhea of 38 weeks.

Her trans- abdominal sonography (TAS) showed a large fibroid at the lower segment of the uterus mainly in the anterior wall of the uterus, measuring about 12× 10× 11 cm.

Caesarean myomectomy was done under spinal anesthesia after delivery of a healthy baby weighing - 2.5kg without any complications. Though caesarean myomectomy is difficult and associated with increased morbidity due to risk of associated hemorrhage, thus, we do not always recommended this but it could be performed in unavoidable conditions.

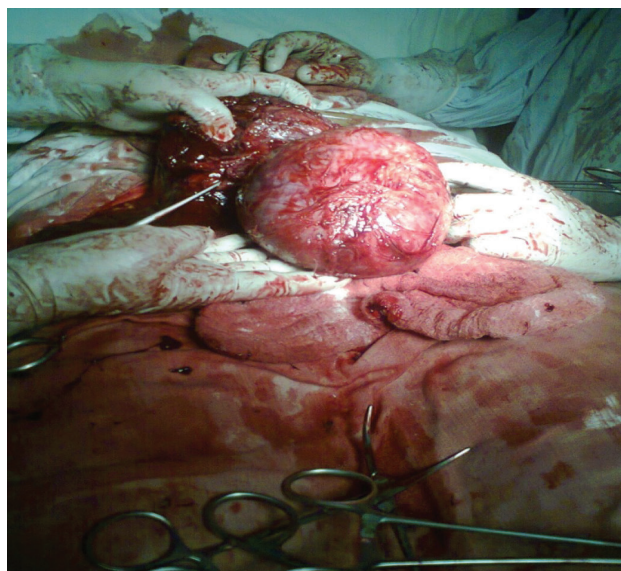
**Keywords:** Caesarean, Fibroid, Haemorrhage, Myomectomy, Pregnancy.

### Introduction

Incidence of uterine fibroid in pregnancy varies from 0.3 to 7.2%<sup>1</sup>. The overall incidence of fibroid uterus is about 40 to 60% by the age of 35 years<sup>2,3</sup>.

Fibroids are asymptomatic in 70% cases, but during pregnancy size of the fibroid often increases and may produce effects on pregnancy such as abortion, preterm labor, mal-presentation, torsion of the uterus and hydronephrosis. Most pregnancy associated with fibroid remain uneventful, but about 10 to 30% of women with fibroid uterus may develop complications during pregnancy<sup>4</sup>.

Myomectomy with caesarean section has been traditionally discouraged mainly due to the risk of hemorrhage associated with surgery as result of increased vascularity of the pregnant uterus and uterine



**Fig-1:** During myomectomy after delivery of the baby

atonicity<sup>5,6</sup>. This procedure also causes post-operative morbidity. But few studies suggested that myomectomy may be carried out during the caesarean section in selected cases<sup>6,7</sup>. If this procedure performed safely and

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simultaneously, the risk of anesthetic hazard, repeat surgery, adhesion, operative cost, and hospital stay could be reduced. Myomectomy is usually done after the delivery of the baby.

### Case Report

A 34 years lady of 3<sup>rd</sup>. Gravida was admitted in AWMCH in the Department of obstetrics & gynecology (OBGYN) with the complaints of amenorrhea for 38 weeks with a known case of fibroid uterus. She had previous one normal vaginal delivery and one abortion and had a history of prolong secondary subfertility. Age of her last child was 12 years. She has been married for 14 years. Her menstrual cycle was regular but for the last few years she noticed excessive blood loss during her menstruation and which was gradually increasing in amount and duration. She was on regular Antenatal care(ANC) and expected date of delivery (EDD) was confirmed by early USG and fibroid was also diagnosed at that time.

On examination, she was normotensive, pulse rate was 80beats/minute, mildly anemic.

Per abdominal examination: symphysio- fundal height (SFH) was 36cm.



**Fig-2:** Myoma after removal

Single longitudinal lie with breech presentation and a palpable mass in the lower abdomen at the midline which was non-tender and moved with the movement of uterus.

On Auscultation: Fetal heart sound (FHS) was 140beats/minutes and regular.

### Investigations:

Revealed hemoglobin (Hb%) was - 9.8gm%, HBsAg was negative, USG report showed a 37weeks single live intrauterine pregnancy with breech presentation, liquor was adequate and Placenta was in fundal position. Estimated fetal weight was 2503 gm. A large mass about (12×10×11) cm was found in the lower uterine segment, predominantly on the anterior wall of the uterus.

Patient also complaint about less fetal movement and CTG was Non-reactive. She underwent emergency C - section.

Before C - section informed written consent was taken for myomectomy and need of hysterectomy if there was excessive per-operative or post-operative bleeding. 2 units of blood were ready in hands and 1 unit was given during the operation. Baby was delivered by breech extraction then myomectomy was done by extending the incision of the caesarean section in 'J' shaped.

Most of the myoma was intramural and submucous variety occupying the uterine cavity and partly subserous. Myoma capsule was separated with the help of electrocautery to reduce per-operative blood loss.

After complete dissection, myoma pedicle was ligated to reduce the blood loss and myoma was enucleated.

After proper hemostasis uterus was closed in two layers by suturing of only one incision site with Vicryl (1 - 0).

To avoid postpartum hemorrhage 24 hours oxytocin drip was given.

Patient was discharged on the 4th post - operative day without any complications.

### Discussion:

Caesarean myomectomy was discouraged in past due to high risk of hemorrhage and increased need of blood transfusion<sup>5,6</sup>.

Recently some authors have advocated myomectomy during caesarean section to remove anterior wall fibroid<sup>6,8,9</sup>.

Another retrospective study investigated the feasibility and out come by using the tourniquet method with

enucleation of single and multiple myomas and this was performed after delivery of the baby and in two cases where small uterine fibroids were present along the incision line, incision was made over the fibroids to enucleate them before. The mean duration of cesarean myomectomy was  $54.75 \pm 4.57$  minutes. There was no significant difference in the mean duration of operation and mean blood loss between the two groups, (Caesarean section & Caesarean myomectomy)<sup>10</sup>.

This study concluded that cesarean myomectomy seems to be feasible and safe in selected cases where a tourniquet is applied.

In our case, though the fibroid was large but blood loss was less than expected (about 400ml) because of the use of electrocautery to enucleate the fibroid and very rapid surgery.

In another study, myomectomy was done prior to delivery of the baby because fibroid was present directly under the incision line.

Mean surgical time was  $54.14 \pm 3.84$  minutes and mean blood loss was 472ml.

This study also concluded that caesarean myomectomy is safe in experienced hands<sup>11</sup>.

In our case, fibroid was present just above the incision line in the lower uterine segment, for that reason myomectomy was done after the delivery of the baby.

Maximum part of myoma was intramural and submucous and partly subserous, blood loss was less than expected amount as no separate incision was given for myomectomy<sup>12</sup>.???

Other similar case of unavoidable myomectomy during cesarean section was reported, without any need of blood transfusion and without any postoperative complication was reported<sup>13</sup>.

In our case, the patient had no episode of postpartum hemorrhage with minimal intraoperative and postoperative blood loss.

Other study had reported that future fertility and pregnancy outcome was not affected in women who had cesarean myomectomy at last delivery<sup>14</sup>.

Another study showed removal of myoma during Cesarean Section is safe and this procedure can be done simultaneously<sup>15</sup>.

Other similar study concluded that myomectomy can be performed without any significant complications by an experienced surgeon<sup>16</sup>.

## Conclusion

In conclusion patient selection is crucial in cesarean myomectomy, large fundal intramural fibroids should be intuitively avoided. Fibroids obstructing the lower uterine segment or accessible subserosal pedunculated fibroids in symptomatic patients can be safely removed by experienced surgeons.

Myomectomy along with Cesarean Section was not recommended mainly due to associated risk of life threatening hemorrhage, with the advent of better anaesthesia and availability of blood transfusion caesarean myomectomy is now considered cost effective and safe procedure in low resource setting but require expertise and experience.

The message is that what was once considered taboo should now be reconsidered.

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