

ORIGINAL ARTICLE

SAFETY OF CAESAREAN MYOMECTOMY

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Background: Uterine fibroids are the most common type of tumours in women arising from uterine myometrium and less commonly from cervix. Objective of the study was to check the safety of caesarean myomectomy. **Methods:** Patients attending Gynaecology-B Unit of Ayub Teaching Hospital having pregnancy with fibroid and undergoing myomectomy along with caesarean section (CS) were included in this prospective study during Jan 2010–Dec 2011. Intra-operative and postoperative maternal morbidity in terms of blood loss, operative time and length of hospital stay was compared to matched pregnant woman with caesarean section alone. **Results:** Out of 6,000 antenatal mothers registered during the study period myoma was detected in 96 (1.6%) cases. Mean age of mother having myoma was 28 years, 70% were primigravida, and mean haemoglobin was 10.56 gm%. Size of myoma was 12 Cm in 30% cases 5 Cm in 23% and more than 1 myoma in 60% cases. There was no significant difference in intra-operative haemorrhage and length of hospital state in comparison matched women with CS although operating time was double than later. None required caesarean hysterectomy. **Conclusion:** Myomectomy can be safely performed in majority of carefully selected patients with myomas without any serious life threatening complications.

Keywords: Fibroids, caesarean section, myomectomy, haemorrhage

INTRODUCTION

Uterine fibroids are the most common type of tumours in women arising from uterine myometrium and less commonly from cervix. The lifetime risk of women of developing fibroids is greater than 60%; 30–70% are in pre-menopausal women.^{1–3} About 1–4% of pregnancies are affected by the presence of fibroids and majority remain asymptomatic.⁴ Complications associated with fibroids include recurrent miscarriage, antepartum and postpartum haemorrhage, placental insufficiency, abruption, preterm labour and delivery, increased caesarean section rate, pain due to fibroid degeneration and torsion.³ Uterine myomas are observed in pregnancy more frequently now than in the past because many women are delaying child bearing till their late thirties, which is the time for greatest risk of myoma growth. Use of ultrasonography has improved the diagnostic capability of detecting small myomas.

Fibroids increase in size throughout gestation, negligible change in volume occurs in 49–60%, significant increase in size occurs in 2–32% and 8–27% of fibroids decrease in size.⁵ Most of growth occurs in first trimester. Larger fibroids (>5 Cm in diameter) are more likely to grow, whereas smaller fibroids are more likely to remain stable in size. When we come across a fibroid at caesarean section we have the options of removing all fibroids, leave them, remove pedunculated fibroids only or remove all anterior wall uterine fibroids. Traditionally myomectomy at caesarean section has been discouraged for fear of intractable haemorrhage due to increased vascularity of pregnant uterus.^{5,6}

The objective of this study was to check the safety of caesarean myomectomy.

MATERIAL AND METHODS

A prospective study in Gynaecology B Unit, Ayub Teaching Hospital Abbottabad was conducted from 1st January 2010 to 31st December 2011. Out of 6,000 antenatal mothers registered during study period myomas were detected on ultrasound in 96 (1.6%) cases. Only those patients were recruited in the study who gave informed consent for myomectomy along with caesarean section. In all patients after spinal anaesthesia abdomen was opened by pfannenstiel incision. Baby was delivered followed by placenta and membranes through lower uterine segment caesarean section.

Uterine incision was closed 1st if fibroid was in upper segment and later in cases of sub-mucosal or lower segment fibroids. Routine myomectomy was performed with simultaneously clamping and legating the feeding vessels. Fibroid bed was closed to obliterate the dead space by vicryl 1 and 2 used to suture the overlying serosa. UAL was performed for extra safety where felt necessary. Tourniquet was never applied. Uterine incisions were kept as anterior as possible.

Patients' data were analysed regarding age, parity, number, size and location of fibroids, time taken for surgery, total haemorrhage, length of postoperative hospital stay, and then compared to women who underwent caesarean section alone.

RESULTS

Out of 6,000 antenatal mothers registered during study period myoma was detected in 96 (1.6%) cases. Mean age of the mothers having myomas was 26.16±3.35 years. Thirty mothers consented for myomectomy.

Table-1: Distribution according to parity (n=30)

Parity	No of cases	%
Primary Gravida	22	73.0
Multi Gravida	6	20.0
Grand Multi Gravida	2	7.0

Table-2: Comparison of procedures

Features	C. Myomectomy	C. Section
Duration of surgery (min)	25-40	15-25
Blood loss (cc)	800-900	600-700
Hospital stay (days)	4	4



Figure-1: Delivery of the baby through an incision below fibroid



Figure-2: Intramural fibroid above incision line

DISCUSSION

Elective myomectomy at caesarean section as prohibited in past because of reported high morbidity, especially haemorrhage, is not an uncommon procedure now with growing evidence supporting the safety of myomectomy at caesarean section, more cases are being reported. Several studies proved the safety of caesarean myomectomy especially if the myoma is situated anteriorly in the lower segment on the proposed site of incision. Michalas *et al*⁷ reported 18 cases of myomectomy during pregnancy, 16 of whom were operated uneventfully at term. Burton *et al*⁸ and Exacoustos and Rosati⁹ have reported similar results with a good perinatal outcome but an increased preterm delivery rate. Kiran¹⁰ in series of 14 cases performed caesarean myomectomy without any serious life threatening complication. Omar *et al*¹¹ reported two cases where myomectomy was mandatory to facilitate the delivery of baby. In our study also one intramural fibroid about 9 Cm in size was first removed situated in lower uterine segment in anterior wall instead of

performing a classical caesarean section. Myomectomy during caesarean section is easier due to looseness of capsule. During caesarean myomectomy retraction of the uterine muscles is enhanced by oxytocics to help arrest the haemorrhage. Haemorrhage can further be reduced by uterine tourniquet, bilateral UAL and electrocautery.^{12,13} We arrested the haemorrhage only by oxytocics, gradual enucleation of fibroid, and ligation of feeding vessel.

Although there is no documented recurrence rate of uterine fibroids after myomectomy at caesarean section, it is likely to be higher than after myomectomy in the non-pregnant state.^{14,15} In our study there was no serious complications. The mean operating time and blood loss was a little more than CS alone. The postoperative stay was the same in both groups.

CONCLUSION

The old dictum discouraging caesarean myomectomy should be reassessed. In a well equipped tertiary care setting with availability of blood bank and expert anaesthetic facilities caesarean myomectomy can be a safe and effective procedure.

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