



Cesarean myomectomy – A study of 14 cases

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OBJECTIVE(S) : To evaluate the feasibility and outcome of myomectomy during cesarean section.

METHOD(S) : The study was conducted from January 1998 to December 2004. A total of 14 cases of cesarean myomectomy done during this period were included. Both single as well as multiple myomas were enucleated during lower segment cesarean section (LSCS). Analysis was done with reference to age and parity, number, size and location of the fibroids, time required for surgery, blood loss, postoperative period, and findings at follow up after 6 weeks.

RESULTS : Mean surgical time was 54.14 ± 3.84 minutes which was more than the mean surgical time of 35 ± 3.26 minutes for LSCS alone in our institution but the difference was not statistically significant ($P > 0.05$). Mean blood loss in cesarean myomectomy was 472 mL which is not very alarming. Postoperative period was uneventful in all the cases under study.

CONCLUSION(S) : Cesarean myomectomy is a feasible undertaking in experienced hands.

Key words : cesarean delivery, myomectomy, cesarean myomectomy

Introduction

Myomectomy is a surgical procedure which is usually not performed during cesarean section. This dislike is because of the increased association with high risk of hemorrhage and difficulty in securing hemostasis. The aim of this study was to evaluate the feasibility and outcome of myomectomy during cesarean section.

Methods

The present study was conducted in our unit at a medical college and hospital. During the 7 year period from January 1998 to December 2004, there were 2016 cesarean deliveries and in 14 out of these cesarean myomectomies were done. In nine of these 14 women fibroids were diagnosed antenatally by sonography and in five they were incidentally detected during lower segment cesarean

section (LSCS). We routinely use spinal anesthesia for cesarean section but in the nine women in whom myomectomy was planned in view of the antenatally diagnosed fibroids general anesthesia was employed. Irrespective of the situation of the myoma the technic of myomectomy was conventional, and involved making an incision over the myoma and enucleating it. The dead space was obliterated by interrupted sutures with 1-0 vicryl. All the myomas were located anteriorly. Myomas located near the cornu were not removed for fear of distortion of patency and anatomy of fallopian tube. If the myoma was located in the lower uterine segment encroaching the proposed line of incision then myomectomy was done prior to delivery of the baby. But in other cases myomectomy was resorted to after delivery of the baby. Uterine incision for LSCS was closed in two layers with 1-0 vicryl and the abdomen closed after ensuring hemostasis. Women were discharged on the 6th post-operative day.

The women were analyzed as regards to age and parity, number, location and size of the fibroids, time required for surgery, blood loss, postoperative period, and findings at follow up after 6 weeks.

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Results

Table 1 gives the details about the 14 women submitted to cesarean myomectomy. Majority of the women were primigravidas and belonged to the age group of 25-35 years while three were younger. There was only one case of subserous pedunculated fibroid. In six women the myomas were entirely confined to the lower uterine segment and in five of them myomectomy was done prior to delivery of the baby as they were directly under the incision line. In the sixth case the baby was easily delivered by LSCS but after that the myoma was seen to be encroaching the upper margin of the incision making suturing impossible without myomectomy. One woman (Case 8) had a huge 28 x 20 cm, intramural myoma encroaching upon the whole of the lower uterine segment as well as a part of the upper segment. Myomectomy had to be done before delivery of the baby. The myoma weighed 2 kg and had even compressed the right parietal bone of the fetal skull during its development. In another case (Case 9) there were six myomas (2-6 cm size), four in the upper segment and two in the lower segment. All were enucleated after delivering the baby. Three out of

the four upper segment myomas were enucleated through a single incision by tunneling. Five cases had myomas confined to the upper segment only. In all these cases myomectomy was done after delivery of the baby.

The average time taken to perform LSCS in our institution is 35 ± 3.28 minutes. Adding myomectomy increased the mean total surgical time to 54.14 ± 3.84 minutes, but the difference is not statistically significant ($P > 0.05$).

Blood loss was estimated from suction aspiration, mops, swabs, and drapings. Mean blood loss was 472 mL. Only in the case with the 2 kg huge myoma, the blood loss was 600 mL. This was the only case which needed blood transfusion.

Postoperative period was uneventful in all the cases and the follow up after 6 weeks showed that the uterus was properly involuted except in the case with a huge 2 kg myoma wherein the uterus was still 12 weeks in size. She came again for follow up after 3 months when the uterus was just bulky.

Table 1.

Case number	Age (years)	Parity	No. of myomas	Location	Size in cm	Time taken for surgery (minutes)	Blood loss
1	21	P ₀₊₀	1	Suberous pedunculated	7x6	45	359
2	26	P ₀₊₀	1	LUS	5 x 8	50	498
3	25	P ₀₊₀	1	LUS	6 x 4	53	485
4	26	P ₀₊₀	2	LUS	2 x 4 and 5 x 5	51	426
5	24	P ₀₊₀	1	LUS	8 x 8	55	479
6	26	P ₀₊₀	1	LUS	10 x 12	56	480
7	27	P ₀₊₀	1	LUS	5 x 4	58	502
8	29	P ₀₊₀	1	Huge fibroid occupying LUS and UUS	28x20	60	600 Blood transfusion needed
9	28	P ₀₊₀	6	4 in UUS and 2 in LUS	2 to 6	59	553
10	29	P ₁₊₁	1	UUS	4 x 4	55	396
11	32	P ₂₊₀	1	UUS	5 x 6	54	450
12	21	P ₀₊₀	1	UUS	3 x 2	53	452
13	28	P ₀₊₀	1	UUS	2 x 5	54	448
14	30	P ₁₊₀	1	UUS	4 x 6	55	480

LUS - Lower uterine segment. UUS - Upper uterine segment.
The postoperative period was uneventful in all the cases.

Of the six patients who could be contacted recently, five are using contraception and one is having secondary infertility.

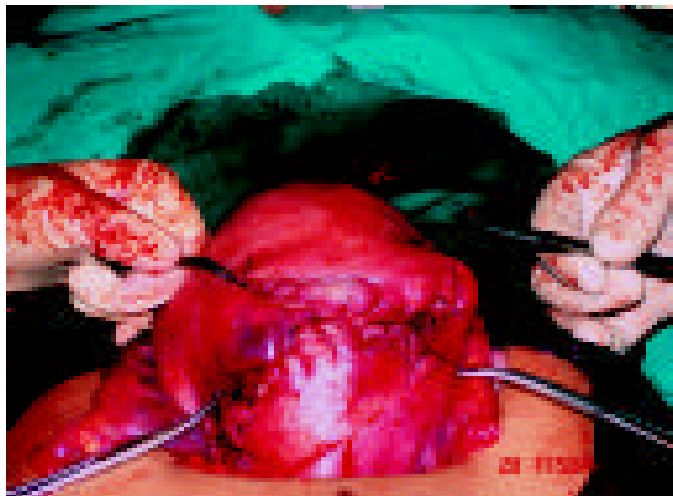


Figure 1. Uterus after closure of the incisions.

Discussion

Since preservation of an organ without loss of its function is always a greater surgical achievement than its destruction, myomectomy is usually preferred to hysterectomy. But myomectomy in pregnancy and during cesarean section has always been condemned. Bonney the pioneer of myomectomy wrote – “It is tempting for the adventurous and sympathetic surgeon to condense the operation of LSCS and myomectomy into one undertaking and save his patient the ordeal of a second admission to hospital. This kindly but misguided policy we heartily deprecate.” But even pupils of Bonney have deviated from this orthodox idea, and Howkins and Stallworthy¹ advocate cesarean myomectomy in selected cases. This is particularly so when the myoma is situated anteriorly in the lower segment on the proposed line of incision. In these cases after mobilizing the bladder the myoma is enucleated by a transverse incision on its surface and then the uterus opened by an incision through the posterior wall of the capsule.

In our study, in one case a huge myoma of 2 kg was removed prior to the delivery of the baby. Omar et al¹ report two cases of large myoma situated over lower segment needing myomectomy for delivery of the fetus during LSCS.

Cobellis et al³ have reported removal of multiple fibroids by electrocautery during LSCS. We removed six fibroids in one case. In a comparative study of cesarean myomectomy on 16 women Brown et al⁴ showed that the mean blood loss in cesarean myomectomy was 495 mL (range 200-1000mL) compared with 355 mL (range 150-900 mL) in the control group. This does not justify discouraging cesarean myomectomy. In our study the mean blood loss in cesarean myomectomy was 472 mL.

In a study conducted on 24 women in Ghana, the average duration of operation was longer in cases having myomectomy with LSCS (62.08 minutes) than in those who had LSCS only (50.83 min)⁵. The average time needed for LSCS is 35 minutes in our institution while cesarean myomectomy required 54.14 minutes.

Though myomectomy during pregnancy is still not encouraged cesarean myomectomy is a feasible undertaking⁶. The reasoning behind this is that a uterus in the immediate postpartum phase is better adapted physiologically to control hemorrhage than in any other stage in a women’s life.

Conclusion

With the advent of better anesthesia and availability of blood, cesarean myomectomy is no longer a dreaded job in the hands of an experienced surgeon and in a well equipped tertiary institution.

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