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Research Article

Caesarean myomectomy: a descriptive study of clinical outcome

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ABSTRACT

Background: The objective was to analyse the clinical outcome of caesarean myomectomy and to evaluate the safety of performing the procedure.
Methods: A total of 23 cases of caesarean myomectomy, conducted in Institute of Medical Science and Sum Hospital Odisha, between January 2008 to December 2012 were analysed.
Results: In this study, out of 23 cases one case needed hysterectomy and another one required relaparotomy. Puerperal pyrexia and sepsis was found in 8.6% cases and 60.8% cases had post-operative anaemia. Intra operative haemorrhage was more than 1000 ml in 82.6% cases though only30.4% cases required blood transfusion. Hospital stay in all patients was on average 8 days post-operatively. There was no maternal or perinatal mortality.
Conclusion: Myomectomy is relatively safe during caesarean section in selected cases with expert hand.

Keywords: Caesarean section, Leiomyoma, Myomectomy

INTRODUCTION

Pregnancy complicating leiomyoma and leiomyoma complicating pregnancy are frequently encountered by the obstetrician. Uterine leiomyoma is found in approximately 2% of pregnant women.[1] This association is mainly seen in elderly primigravidas. Myomectomy at time of caesarean delivery has traditionally been discouraged. With the exception of small, pedunculated fibroids, most of the leading obstetric textbooks advice against myomectomy during caesarean delivery due to theoretical risks of intractable haemorrhage and increased postoperative morbidity.[2,3] Myomectomy as a separate procedure during caesarean increases the haemorrhage by about 10%[4] while at the same time it can avoid second surgery. Uterus in the postpartum period is better adapted physiologically to control haemorrhage by contractions and retractions and we can take this advantage by doing caesarean myomectomy. Recent reports suggest, myomectomy in experienced hands is possible and safe.[5] In an attempt to define the risks of myomectomy during caesarean delivery, we looked at our five year experience at our institution with the procedure and to analyse the clinical outcome.

METHODS

This was a descriptive study of 23 patients of caesarean myomectomy done between Jan 2008 to Dec 2012 in Institute of Medical Science and Sum hospital, Odisha. All the pregnant women who were diagnosed to have fibroid either by antenatal ultrasonography or incidentally found intra-operatively were included in the study. Those who had history of antepartum haemorrhage and where other procedure like ovarian cystectomy was performed were excluded. A detailed history was obtained from all the patients. Clinical examination and routine investigations were done and analysed. All the data on age, parity, gestational age, indications for caesarean section were retrieved. Other information abstracted were total time taken for the surgery, location of the fibroid, type and sizes of fibroids removed, estimated blood loss at surgery,

requirement of blood transfusion and complications encountered. As a protocol in our hospital all the patients were given oxytocin infusion for 12 hours post operatively and all of them were received broad spectrum antibiotics. All were followed up till 6wk after caesarean section with clinical examination and ultrasonography.

RESULTS

A total of 23 patients of caesarean myomectomy performed between Jan 2008 to Dec 2012 in Institute of Medical Science and Sum hospital, Odisha were included in the study. In our study the mean age was 31.2 yrs and majority of patients were in 31- 35yr age group (43.4%) (Table 1a). Most of the patients were primigravida (69.5%) and 78.2% of cases were at term (Table 1b,c). Fetal distress (30.4%) was the commonest indication of caesarean section and only in 17.3% cases caesarean was done due to presence of fibroid in lower uterine segment (Table 2). Emergency surgery was performed in 14 patients while 9 patients had undergone elective caesarean (Table 3). Intraoperatively 51.7% were non-pedunculated and 48.27% were pedunculated fibroid. Most of the fibroids were less than 5cm (51.7%), whereas 41.3% were 5-10 cm and only 6.8% were more than 10 cm in size (Table 4). Though 19 patients had intraoperative blood loss of more than one litre, only 7 patients required transfusion (Table 5). With regards to the outcome of caesarean myomectomy 60.8% developed anaemia while only one patient required subtotal hysterectomy, one required re-laparotomy and 2 patients developed puerperal sepsis (Table 5).

Table 1a: Age distribution (n=23).

Age in years	No. of patient	Percentage
26-30	7	30.4
31-35	10	43.4
36-40	5	21.7
41-45	1	4.3

Table 1b: Parity distribution (n=23).

Parity	No. of patient	Percentage
Primigravida	16	69.5
Multigravida	7	30.4

Table 1c: Gestational period (n=23).

Gestational age	No .of patient	Percentage
Preterm	3	13.0
Term	18	78.2
Post term	2	8.6

Table 2: Indication of caesarean section (n=23).

Variables	Number	Percentage
Fetal distress	7	30.4
Malpresentation	3	13.0
Uterine fibroid in lower segment	4	17.3
Previous LSCS	4	17.3
Non progress of labour	2	8.6
Cephalopelvic disproportion	3	13.0

Table 3: Timing of surgery (n=23).

Variable	Number	Percentage
Elective	9	39.1
Emergency	14	60.8

Table 4: Fibroid characteristics (n=29).

Variables	Numbers	Percentage
Type of fibroid removed (n=29)		
Non pedunculated fibroid (intramural, subserous, submucous)	15	51.7
Subserous pedunculated	14	48.27
Size (n=29)		
<5 cm	15	51.7
5-10 cm	12	41.3
>10 cm	2	6.8

Table 5: Outcome of all caesarean myomectomy (n=23).

Variables	Number	Percentage
Estimated blood loss		
<1000ml	4	17.39
>1000ml	19	82.6
Blood transfusion		
Transfused	7	30.4
Not transfused	16	69.5
Complications		
Subtotal hysterectomy	1	4.3
Re- laparotomy	1	4.3
Puerperal pyrexia and sepsis	2	8.6
Anaemia	14	60.8

DISCUSSION

Recently uterine leiomyomas are more encountered during pregnancy, because of delayed conception till late thirties.[6] Caesarean myomectomy was practically absent from the obstetric literature until the last decade.[4] The major problem associated with caesarean myomectomy is the risk of haemorrhage. Therefore the management of the fibroid encountered during caesarean section poses a therapeutic dilemma. Interval myomectomy is the usual practice. However several authors have published their result on caesarean myomectomy supporting it. In our study the mean age of patient was 31.2 years with highest no of patients are within 35 years (73.9%). Majority of them were primigravida (69.5%) and at term pregnancy (78.2%). Though 82.6% patient had blood loss >1000ml, only 7 cases (30.4%) had blood transfusion. Adesiyun et al reported only 9.1% of patients requiring blood transfusion in 22 cases of caesarean myomectomy.[10] Kant Anita et al showed 50% requirement of blood transfusion in a series of nine cases.[6] With regard to complication one case required hysterectomy due to torrential haemorrhage as it was located on the right cornu of the uterus. Hassan et al, in their series reported three hysterectomies out of ten patients those had undergone caesarean mymectomy.[7] Another study by Exacoustos and Rosati showed nine similar cases of which three had severe haemorrhage followed by hysterectomy.[8] Kwawukume reported uneventful caesarean myomectomy in 12 cases.[4] In another case of our study relaparotomy was required due to post-operative intraperitoneal haemorrhage because of slippage of the ligature. The stump was religated and the uterus was preserved. Roman and Tabsh reported 111 cases of caesarean myomectomy without any complication.[9] Post operative fever and sepsis was in 8.6% cases in present study. All these patients were in labour before operation, so elective caesarean section would have avoided this complication. Adesiyun et al had also reported 9.1% of puerperal pyrexia and sepsis in 23 similar cases.[10] The hospital stay of all patients after the surgery was 8 days. Ehigiegba et al in a study advocated routine anterior wall caesarean myomectomy, most common morbidity being anaemia in 60% cases.[11] Our study showed similarly 60.8% post operative anaemia. In contrast Adesiyun et all had reported anaemia only in 9.1% cases.[10] In this study though intra operative haemorrhage of more than 1litre was in 82.6% cases, blood transfusion was given to only 30.4% of cases. This was to avoid unnecessary blood transfusion related complications. This might be the cause of high incidence of post-operative anaemia. Caesarean myomectomy is cost effective having other benefits like increased chance of vaginal birth after caesarean when removed from lower uterine segment along with decrease fibroid related complication in subsequent pregnancy.[12,13] Moreover it avoids interval myomectomy, repeat surgery and anaesthesia exposure.

CONCLUSION

Myomectomy during caesarean section can be performed in selected cases with expert hand in well-equipped hospital having blood transfusion facility with minimal maternal morbidity.

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