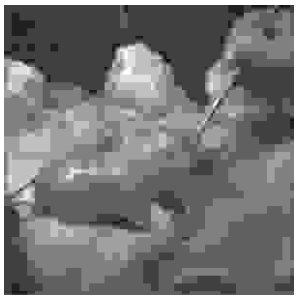
ORIGINAL PROF-1116

# MYOMECTOMY DONE DURING CAESAREAN SECTION



**PROF. DR. MAHNAAZ ROOHI**
**MBBS, MRCOG, FRCOG,**
Professor & Head of Gynae Unit I,
PMC/Allied Hospital Faisalabad.

**DR. RAHILA FARHAT CH.**
**MBBS, MCPS, FCPS,**
Gynaecologist Social Security Hospital,
Faisalabad.

**ABSTRACT... Objective:** To evaluate the outcome of myomectomy during caesarean section. **Study Design:** A retrospective study. **Setting:** Gynae unit I, Allied Hospital Faisalabad . **Period:** From 2001 to 2002. **Material and Methods:** A total of 40 patients attending gynae unit I of Allied Hospital having pregnancy with fibroid were included in the study. A special consent was taken from the patients for performing myomectomy. A performa was used to collect the data regarding maternal morbidity and mortality and perinatal outcome, the results were then analyzed. **Results:** It was seen in this study that in 28 patients the duration of hospital stay was 7-10 days which is not more than the stay during caesarean section. It was only in 02 patients the stay was more than 10 days. Regarding blood transfusion in 90% of the cases required only two pint of blood during operation. Regarding blood loss in 20 patients it was only 500ml. The loss was more than 1000 ml in only 04 cases. Perinatal outcome. The outcome was satisfactory and the babies weight corresponded with the gestational age.

## INTRODUCTION

Uterine fibroids are also known as leiomyomas or myomas. There are the most common benign pelvic tumours in women. Fibroids develop only during a women reproductive years with a peak incidence between 30-50 years. 20% of the women harbour myomas of different sizes and 50% of the fibroids are asymptomatic[1].

Depending upon the location myomas are divided into intramural, subserous and sub mucous fibroids. Myomas are rarely associated with pregnancy. This association is most commonly seen in elderly primigravida. It is usually stated that fibroids increase in size during pregnancy and shrink during puerperium although this has not been the finding of recent studies Aharoni et al based on serial USG. Many pregnancies associated with fibroid proceed uneventfully. There is increased risk of spontaneous abortion and pre term labour. Pregnancies with fibroid should be treated as high risk pregnancies during pregnancy fibroid often enlarge but because they also tend to become soft as a result of interstitial oedema they flatten out and become indistinct. Sub-serosal tumours on the other hand may be easily palpated as the uterus enlarges and on occasion may be mistaken for fetal parts. Surgical removal of fibroid during pregnancy is not recommended, with treatment confined to use of analgesia for pain from red degeneration. The removal of fibroids at time of caesarean had been long contraindicated although recent reports suggest

myomectomy in experienced hands is possible and safe[2].

Myomectomy at the time of caesarean section has been discouraged traditionally because of the risk of haemorrhages. A retrospective study was performed in USA showing that in selected patients myomectomy during caesarean section does not appear to result in an increase in the risk of intrapartum and short term post partum morbidity[3]. With the exception of small pedunculated fibroids, most leading obstetrics text books advise against myomectomy during caesarean delivery due to theoretical risks of intractable haemorrhages and increased post operative morbidity[4,5]. In the medical literature, however, there are few studies which directly address this controversy. In fact, this recommendation relies entirely on a body of evidence consisting of case series and anecdotes which give conflicting results[6,7,8,9,10,11].

## MATERIAL AND METHODS

A reproductive study was carried out in gynae unit I of Allied Hospital Faisalabad. 40 patients having pregnancy with fibroid were admitted during the period from 2001 to 2002. After admission detailed history clinical examination and routine test carried out.

The women who fulfilled the criteria were included in the study[1]. Documented fibroid uterus during pregnancy by antepartum ultrasound or by intra-operative findings[2]. Delivery by caesarean section[3]. No evidence of antenatal bleeding (e.g placenta previa or abruption)[4]. No other procedures at the time of caesarean section besides myomectomy (eg cystectomy). A standard proforma was prepared and duty filled fo each patient and special consent taken from every patient to carry out the procedure. Only those patients were included in the study who had fibroid with pregnancy and mode of delivery were excluded from the study. During the study their morbidity and mortality was assessed. Characteristics abstracted included age, parity, gestational age at delivery type of caesarean performed, size and location of fibroid, duration of hospital stay, incidence of post partum fever and hemorrhage. The size of fibroid was obtained from the histopathology report or if the report was not available, the surgeons findings in the operative note. Hemorrhage was defined as decrease in hematocrit of 10 points from the preoperative value to the post operative value or the need for intra-operative transfusion.

## RESULTS

**Table. I**

| Age | No. Of Patients |
|---|---|
| 20-30 Years | 08 |
| 31-40 Years | 32 |
| 80% of the patients belonged to th middle age groups. | |

**Table. II Symptoms at time of presentation**

| | |
|---|---|
| Mass abdomen | 32 |
| Pain abdomen | 04 |
| Difficulty in micturition | 01 |
| Decreased fetal movements | 01 |
| 80% of the patients presented with mass abdomen. | |

**Table. III**

| Parity of the Patients | No. Of Patients |
|---|---|
| Primigravida | 25 |
| Multigravida | 15 |

**Table. IV**

| Presentation of Fetus | No. Of Patients |
|---|---|
| Transverse lie | 28 |
| Longitudinal lie | 12 |

Majority of the patients delivered fetus of weight corresponding to their gestational age.

| Table. V | |
|---|---|
| **No of Fetus** | **No of Cases** |
| Singleton Fetus | 38 |
| Multiple pregnancy (Twin) | 02 |

| Table. VI | |
|---|---|
| **Location of Fibroid** | **No of Cases** |
| Cervical Fibroid in delivery of given | 01 (this case has difficulty baby so classical incision was |
| Fibroid in broad ligament | 02 |
| Fibroid on anterior wall | 15 |
| Fibroid on posterior wall | 18 |
| Multiple fibroid | 03 |
| Subserosal Fibroid | 01 |

| Table. VII | |
|---|---|
| **Size of Fibroid** | **No of Cases** |
| < 10 cm | 16 |
| > 10 cm | 24 |

| Table. VIII | |
|---|---|
| **Duration of Hospital Stay** | **No of Cases** |
| < 7 days | 10 |
| 7-10 days | 28 |
| > 10 days | 02 |

| Table. IX | |
|---|---|
| **No of Pints of Blood Required** | **No of Cases** |
| 1-2 Pints | 36 |
| 3-4 Pints | 04 |
| *90% of patients required only 02 pints of blood.* | |

| Table. X | |
|---|---|
| **Blood Loss During Myomectomy** | **No of Cases** |
| Up till 500 ml | 20 |
| 500-1000 ml | 16 |
| > 1000 ml | 04 |
| only 10% of patients had blood loss > 1000 ml. | |

| Fetal Outcome | |
|---|---|
| **Weight of Baby** | **No of Cases** |
| < 1 kg | 02 |
| 1.1kg - 3 kg | 34 |
| 3.1 kg - 4 kg | 03 |
| > 4 kg | 01 |

## DISCUSSION

The major problem associated with myomectomy is heavy and loss. It is therefore most important decision to perform myomectomy is carefully considered. Myomectomy during caesarean section is not always hazardous procedure and can be performed without complication by experienced obstretician[12]. If the intra-operative blood loss is heavy then the surgeon may have to resort to hysterectomy. Non of our patients required hysterectomy.

The management of fibroid encountered during caesarean delivery poses a therapeutic delimma. Myomectomy during caesarean has traditionally been discouraged. In fact many surgeons perform classical caesarean instead of a low transverse caesarean as a means to avoid lower uterine segment myomas, a procedure which carries a risk of increased blood loss in and of it self. The largest series to date to evaluate this debate, a study was carried in USA to allay some of the fears of increased short term morbidity with caesarean myomectomy, in this study it was demonstrated that myomectomy during caesarean delivery does not

increase the risk of hemorrhage, post operative fever or prolong hospital stay.

These studies indicate that in selected patients and in experienced hands myomectomy during caesarean delivery can be safe procedure[3]. But in which patients? Clearly large fundal fibroids intuitively should be avoided. Although no statistically significant difference was found between the patients who under went intramural myomectomy or myomectomy of fibroid > .6cm in size and the control group, this lack of difference may be attributed to a small sample size and therefore insufficient power to detect such a difference. Thus intramural myomectomy should be performed with caution. But in setting of symptomatic patient with an accessible subserosal fibroid and pedunculated fibroid or the patients with fibroid obstructing lower uterine segment the study carried out in USA indicated that this procedure can be safely carried out, several recent studies have described techniques which minimize blood loss at caesarean myomectomy, including uterine toniquet[11,13], bilateral uterine artery ligation[13], and electrocautery[14]. There was also no increase in incidence of post operative fever, duration of hospital stay. No patient required hysterectomy.

Uterine involution was normal and there was significant complications during puerperium. There was no significant difference in intra operative and post operative morbidity and blood loss in performing caesarean section alone and caesarean section with myomectomy when torniquet is applied[15].

## COMMENTS

The message from the study is clear; what once was thought to be done taboo should be considered. Myomectomy during caesarean delivery can be safely effective procedure in safe hands. The main principles of myomectomy during pregnancy are;

1. It should be done by an experience person.
2. It should be done with full consent of the patient. It is however important that baby must be delivered prior to attempting myomectomy.

## REFERENCES


1. Cramer S, Pate A. **Frequency of uterine fibroids.** Am J Clin Pathol 1990; 94: 435-438.
2. Brown D, Fletcher H, Myrie M, Ried M. **Caesarean myomectomy a safe procedure.** A retrospective case controlled study. J Obstet Gynecol 1999; 19: 139-141.
3. Ashley S, Roman, Khalil MA, Tabish. **Myomectomy at time of caesarean delivery;** A retrospective cohort study; Int J Gyneccol Obstet 2005 May; 89(2): 90-3.
4. Depp, R. Caesarean delivery in; Gabbe SG, Niebly JR Simpson JL ed Obstetrics; **normal and problem pregnancies.** 4 New York; Churchill Living stone; 2002 p 599.
5. Cunningham FG; Gant NF; Lavenok KJ; Gilstap LC, Haulth JC, Wenstrom KD ed williams onstetrics 21 New York Mac Graw hill2001 chapter 35; **abnormalities of the reproductive tract.** p 930.
6. Michalas SP Oreopoulou FV Papageorgiou JS **Myomectomy during pregnancy and caesarean section.** Human Reproduction 1995; 10: 1869-70 (Pub Med).
7. Hasan F, Arumugam K, Sivanesaratnam V**, uterine leiomyomata in pregnancy.** Int J Gynecol Obstet 1990; 34: 45-8 doi.
8. Ortac F Gungor M Sonmezer M, **Myomectomy during caesarean section.** Int J Gynecol Obstet 1999; 67: 189-90.
9. Burton CA Grimes DA, March CM. **Surgical management of leiomyomata during pregnancy.** Obstet Gynecol 1989; 74: 707 (Pub Med).
10. E Higiiegbe AE, Ande AB< Ojobo SI, **Myomectomy during caesarean section.** Int J Gynecol 2001; 75: 2-5.
11. Kwawukume EY, **Caesarean myomectomy.** Afr J Reprod Health. 2002; 6: 38-43 (Pub Med).
12. Kaymak O, Ustunyurt E, Okyay RE, Kalyoncu S, Mollamahmutoglu L, **Myomectomy during caesarean section.** Int J Gynecol Obstet 2005 May; 89(2) 90-3.
13. Sapmaz E, Celik H, A Itungul A. **Bilateral ascending uterine artery ligation vs torniquet use for hemostasis in caesarean myomectomy.** A comparison. J Repord Med 2003; 48: 950-4 (Pub Med).
14. Cobellis L, Florio P, Stradella L, Lucia ED, Messalli EM, Petraglia F, Cobellis G. **Electro cautery of myomas during caesarean section- two case reportes.** Eur J Obstet Repord Biol 2002; 102: 98-9 (Pub Med).
15. Kwawukume EY. **Caesarean myomectomy.** Afr J Repord Health 2003 April; 7(1): 125.