

# A Study on Intra-Operative Difficulties in Repeat Caesarian Sections

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## ABSTRACT

**Introduction:** Caesarian section has become better with sophistication in anaesthesia and surgery, however little is known about the intra-operative difficulties involved in multiple caesarian sections. Therefore, the aim of the present study is to know type of intra-operative difficulties encountered and prevalence of those difficulties in proportion.

**Material and method:** The study was conducted in a tertiary care hospital. 100 subjects were included for the study by using inclusive and exclusive criteria. The data compiled in excel and compared with various variables like age, registration of the cases during pregnancy period etc. In the study, reasons for adopting caesarian type of delivery were assessed and type of difficulties faced during surgery was analyzed.

**Results:** 46% of cases were in the age group of 18-23 years & 48% in the age group of 23-28 years. 62% of the cases were booked for safe delivery. Emergency caesarian was done in 28% of cases. The following are the indications for present caesarians: CPD-16%, previous 2 caesarians-35%, foetal distress 18% and miscellaneous-31%. Low transverse incision was given in 96% of cases. In the intra-operative complications, 46% of the complications related to adhesions. The second commonest complication is hemorrhage. In 11% of cases bladder related complications were observed.

**Conclusion:** Adhesions and haemorrhages are the major complications in intra-operative period of repeat caesarian section. Adhesion not only slowed down the surgical procedure but also necessitated the change of surgeon to more experienced one.

**Keywords:** Intra-operative complications, CPD, foetal distress

due to frequent pregnancy complications like fetal distress, cephalo pelvic disproportion, bad obstetric history and scar dehiscence which resulted in repeat caesarian sections. During operation several difficulties may be encountered by the obstetrician like adhesions, haemorrhage, bladder injury, gastrointestinal tract injury, adherent placenta or rupture of scar.<sup>3</sup> Conducting repeated caesarian sections not only challenging to the obstetrician but also strain on existing and limited healthcare resources as well as financial burden to the families.<sup>4,6</sup> Therefore, the present study was to evaluate the type of difficulties faced while performing caesarian sections by obstetricians from a tertiary care hospital perspective.

## MATERIALS AND METHODS

The study was carried out in the obstetric units of the Kamini Institute of Medical Sciences, Narketpally, Telangana State from the period of October 2010-September 2011. This is a both a referral center and territory center for high risk obstetric cases in Narketpally. All women who aged 18 years to 32 years with history of undergone previous caesarian were included in this study. This is a cross-sectional study where we included both retrospective and prospective studies during one year of the study. We enrolled both the sample of cases which are booked case with previously had antenatal checkups and also un-booked (unregistered) case who did not had no antenatal checkups or insufficient antenatal checkups. Those who have undergone laprotomy for some cause in the past and primigravida were excluded from the study. Following booking in the antenatal clinic, women who had no complications were seen subsequently every 4 weeks until 28 weeks, fortnightly until 36 weeks and weekly until the onset of labor or elective delivery. Women with complications were usually seen more frequently depending on their conditions; alternatively they could be admitted into

## INTRODUCTION

Caesarian section is done when labour is contraindicated or vaginal delivery is found unsafe for the foetus or mother. The indications are broadly divided into two categories as absolute and relative. In the absolute category placenta previa, CPD, Pelvic mass obstruction, Carcinoma of cervix and vaginal obstructions are the major causes.<sup>1</sup>

In the relative indications previous section, foetal distress, malpresentation, APH, systemic disorders, bad obstetric history and hypertensive disorders are the major causes for adopting caesarian sections.<sup>2</sup> "Once a caesarian, always a caesarian" because of safe mode of delivery associated with less perinatal complications despite high health and financial cost. Repeat caesarian sections are commonly performed

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the antenatal ward for in-patient care. These are the cases irrespective of emergency/elective caesarian section. The data was compiled and analyzed for intra-operative difficulties during emergency and elective caesarian section in repeat caesarian sections. During the pre and post operative period both clinical examination and necessary investigations like estimation of Hb, RBS, HIV etc., were done.

**RESULTS**

A total of 100 women made up of with at least one previous caesarian. Out of the 100 women with previous caesarian section cases studied 94 (94%) cases were of the age group 18 – 28 years; of which 46 (46%) cases were of age group between 18-23 years and 48 (48%) cases were of age group between above 23-28 years (Table 1).

Of total 100 case 72 (72%) cases were elective caesarian section and 28 (28%) were had emergency caesarian section. Out of 72 elective cases of which 31 cases were of age group between 18-23 years, 37 cases were of age group between above 23-28 years and only 4 cases in the age group of above 28-32 years (Table 2).

The indications for present caesarian section are shown in the figure 1. Out of 100 cases major indication were previous 2 or more caesarian sections which are about 35 (35%) cases. The other major indications for caesarian section were CPD 16% (16/100), intrapartum fetal distress 18% (18/100), bad obstetric history 6% (6/100) and scar dehiscence 6% (6/100) (Figure 1).

The frequent intra-operative complications observed during caesarian section in are shown in the figure 2. Out of 100 cases most common challenges observed during the surgery, are adhesions (46%), haemorrhage (16%), bladder drawn-up (11%), scar dehiscence (9%) and extension of angles (8%) (Figure 2). There were no injuries to surrounding structure due to surgery or during surgery.

**DICUSSION**

This present study from our department of Obstetrics and Gynaecology at Kamineni institute of medical sciences tried to identify the frequent intra-operative complications associated with multiple repeat caesarian sections. Repeat caesarian sections are commonly performed due to many reasons which might have risk fetal and maternal morbidity–mortality.

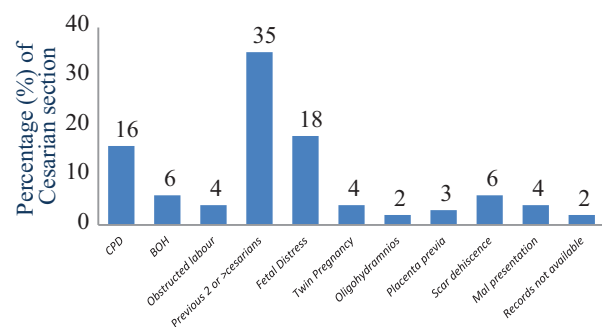
From this study more frequently adhesions were noted during operative delivery in the study group (46%), not unexpected as dense adhesion would tend to result from repeated surgery on the abdominal wall with increased chance of post-operative infection. These adhesions are as high as those in the multiple repeat caesarian sections who had more than four repeat caesarian sections.<sup>7</sup> Operative and post-operative course, including duration of operation, estimated blood loss during surgery, might increase due to adhesions

Age group in years	No. of cases n = 100
18 – 23	46
>23 – 28	48
>28 – 32	6

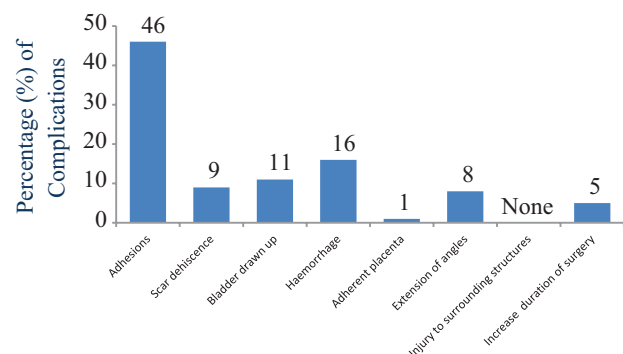
**Table-1:** Age wise distribution of cases

Age group in years	No. of cases n=100	
	Emergency n=28	Elective N=72
18–23	15	31
>23–28	11	37
>28–32	2	4

**Table-2:** Age wise distribution of cases with elective/emergency caesarian sections



**Figure-1:** Indication for present caesarian section (n=100)



**Figure-2:** The incidence of intra-operative complications

and also could increase the incidence of wound infection and length of hospital stay this could again influence based on severity of pelvic adhesions.<sup>7</sup>

Of 100 patients from this study second most common complication was haemorrhage which was about 16%. The complication of haemorrhage was varied from different previous studies, study from Pradip Sambrey et al<sup>8</sup> reported 24%, Anuradha Kumar et al<sup>3</sup> reported 10% and A.Sirju Singh et al<sup>9</sup> reported 22.3%. In the present study the overall incidence of haemorrhage as a part of intra-operative complication being 16% which is about 8% less than the study of Pradip Sambrey et al.<sup>8</sup> From the operative point of view, a repeat number of previous caesarian sections is associated with technical difficulties in separation of adhesions and increased the average surgery time in the study, which might cause difficulty in achieving high Apgar score of the newborn and may increase requirement the neonatal intensive care unit. The success and the complication arising from labour in women

with previous caesarian sections require further evaluation. Usually, most obstetricians do not attempt trial of labour after previous caesarian sections. Need of last few visits to obstetricians in order to decide the mode of delivery to undergo elective or emergency section in a centre both between equipped and manual.

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## CONCLUSIONS

Modern obstetrics practice for medical, social, economic and legal reasons had witnessed and increase in the primary caesarian section rate every year. This has created a common clinical entity of 'previous caesarian section'. In subsequent pregnancy giving high risk pregnant status to the reference pregnancy. Adhesions and haemorrhages are the major complications in intra-operative period of repeat section. These adhesions not only slowed down the surgical procedure but also necessitated the change of surgeon to more experienced one.

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