

# A Study on Reasons for Repeated Cesarean Sections in a Tertiary Care Hospital

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## ABSTRACT

**Introduction:** The cesarian section rate continues to rise in many countries with routine access to medical services. Therefore we tried to know the causes of cesarian sections in a tertiary care set up.

**Material and methods:** In this study 100 subjects were randomly taken after assessing for inclusive and exclusive criteria. During the preoperative period, the study subjects were examined clinically and necessary investigations were done. The data of the cases were compiled and analyzed. Variables like age, period of registry of the cases during pregnancy, Indications for previous cesarian sections etc., were analyzed. Three age groups were taken to analyze the study subjects: first group with 18-23 years, second group with 23-28 years and third group 28-32. In the present study, 46, 48 and 6 were registered in the above age groups. 38 of 100 cases were not booked prior to the delivery.

**Results:** Indications for the previous cesarian sections were analyzed. 26 of 100 cesarians were due to cephalo pelvic disproportion, 10 of 100 were due to bad obstetric history. 1 of 5 of the patients was suffering from hypertensive disorder. Malpresentation and failure to progress were the causes 12 of 100 cases in each category. During the present pregnancy also the reasons for opting for cesarian section were analyzed. 35 of 100 cases were due to previous 2 cesarians and in another 16 of 100 were due to cephalo pelvic disproportion. Fetal distress is observed in 18 cases.

**Conclusion:** The most common clinical entity for cesarian section is of previous cesarian section and followed by cephalo pelvic disproportion.

**Key Words:** Cesarean section, Cephalo pelvic disproportion, Malpresentation, foetal distress

## INTRODUCTION

Cesarian section is defined as delivery of foetus through the incision in the abdominal wall (laparotomy)<sup>1</sup> in the uterine wall. Cesarean 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: 1. Absolute 2. Relative. Increasing rate of cesarian section between 1965-1988 by four times is not completely understood, but some explanations include the, women are having fewer children, raising maternal age, increasing incidence of breech presentation, decreased incidence of conducting mid-pelvic forceps and vaccum deliveries, increasing rates

of induction of labour, rise in prevalence of obesity, concern for malpractice litigation.<sup>1</sup> More than few decade ago it was reported that failure to perform a cesarian delivery and thus avoid adverse neonatal neurological outcome (Cerebral palsy) was the dominant obstetrical claim in the United states. In addition, few elective cesarian deliveries are now performed due to concern over pelvic floor injury associated with vaginal birth.<sup>2</sup> The picture has changed little specifically in 2001. A brain damaged infant was the claim responsible for 40% of all medico-legal indemnity paid by obstetrician and gynaecologists (physician's insurance of America 2002). Some elective cesarian deliveries are now performed due to concern over pelvic floor injury associated with vaginal birth.<sup>2</sup> The indications for cesarian section are multiple and multi-factorial. Repeated cesarian sections are associated with various complications like adhesions, haemorrhage, bladder injury etc.<sup>4</sup> The present study has been taken up in a tertiary care set to evaluate the reasons for adopting cesarian section in place of vaginal delivery. The objective of this study is to evaluate the reasons for adopting repeat cesarian section in those who had previously cesarian section delivery.

## MATERIALS AND METHODS

The study was carried out in the obstetric units of the Kamineni 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 are aged 18 years to 32 years with history of undergone previous cesarian were included in this study. This is a cross-sectional study where we included both retrospective and prospective stud-

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ies 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 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 the antenatal ward for in-patient care. These are the cases irrespective of emergency/elective cesarian section. The data was compiled and analyzed for reasons for reasons for repeated cesarian 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 cesarian. Out of the 100 women with previous cesarian 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 66 (66%) cases were booked and 44 (44%) were un-booked cases. Out of 66 booked cases of which 28 cases were of age group between 18-23 years, 34 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).

Among women with those who had previous cesarian section, the commonest indications for primary cesarian section were cephalo pelvic disproportion (CPD) 26% (26/100), abnormal lie/malpresentation 20% (20/1005), suspicious fetal status/intrapartum fetal distress 12% (12/100), poor/failure to progress of labor and/or prolonged labor 12% (12/100) and bad obstetric history 10 (10/100) (Figure 1). Please see figure 1 for all other accounted reasons for previous cesarian sections. Of all those 100 cases of previous cesarian section, 72 (72%) were had elective cesarian sections.

The indications for present cesarian section are shown in the figure 2. Out of 100 cases major indication were previous 2 or more cesarian sections which are about 35 (35%) cases. The other major indications for cesarian 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 2).

**DISCUSSIONS**

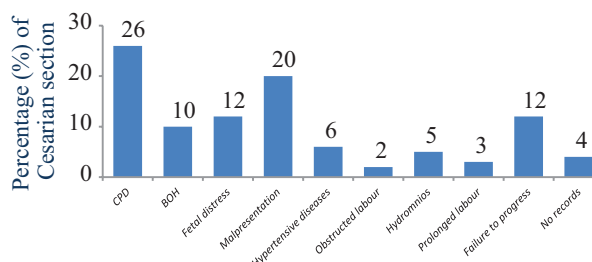
The present study from our department of Obstetrics and Gynaecology at Kamineni Institute of medical sciences has identified the risks associated with subsequent pregnancies

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

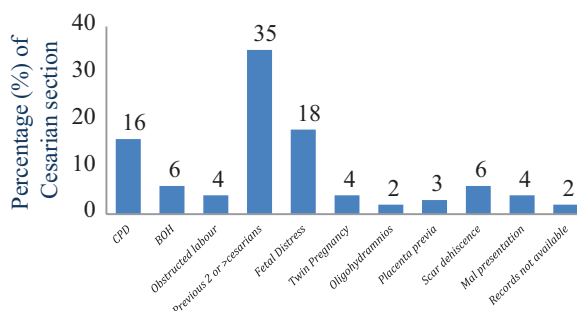
Age group in years	No. of cases n=100	
	Booked n=66	Unbooked N=44
18–23	28	22
>23–28	34	14
>28–32	4	2

**Table-2:** Age wise distribution of cases based on booked and unbooked



CPD, Cephalo pelvic disproportion; BOH, Bad obstetric history

**Figure-1:** Indications of previous cesarian section (n=100)



CPD, Cephalo pelvic disproportion; BOH, Bad obstetric history

**Figure-2:** Indication for present cesarian section (n=100)

in women who had one previous cesarian section. The old postulate: “Once cesarian, always cesarian” leads to repeated Cesareian sections in women who have had previous cesarian section. In our study, previous cesarian section was the leading indication (35%) for subsequent cesarian section in this study and was the main reason recorded for more than one third of cases. Also this study showed that previous cesarian section had frequent incidence of fetal distress, cephalo pelvic disproportion, bad obstetric history and scar dehiscence which resulted in repeat cesarian sections.

Previous two or more cesarian sections were the main indications in our study for repeat Cesareian sections. May be reluctant to give a trial of vaginal delivery after two cesarian sections due to the fear of uterine rupture and associated risk to the mother, and the foetus. The studies conducted by Mollison et al., in 2005<sup>5</sup> and Kenner et al., in 2007<sup>6</sup> in the western world have shown that women those who delivered previous birth by cesarian sections were less likely to choose to have a subsequent pregnancy (66.9%) compared with those having

spontaneous vaginal delivery (73.9%) and instrumental vaginal delivery (71.6%), and they more likely to have problems like antepartum haemorrhage, preterm or prolonged labour, morbidly adherent placenta, and the risk of malpresentation or an ectopic eventuality in their next pregnancy.<sup>5,6</sup>

The study conducted by Raksha Arora et al.<sup>7</sup>, in 1982 have shown the cephalo pelvic disproportion rate of almost 44.6% (n=336) which is very less in our study (16%). This high rate of cephalo pelvic disproportion in Raksha Arora et al.<sup>7</sup>, in 1982 with the current study conducted in 2011 reflects changing trends of delivery over the last two decades. These trends may be related women better socioeconomic status and education, improved healthcare setup, accessibility of skilled health professionals.

Foetal distress accounted for 18% and was the second commonest indication for cesarian sections in this study; this situation arises often due to the emergency to save the new born. Similar trend was observed by Pradip Sambrey et al.<sup>8</sup>, in 1992 and Anuradha et al.<sup>9</sup>, in 1996, where they reported rate of incidence 26.9% and 35.25%, respectively. Besides, 31% of our patients had other reasons for repeat cesarian sections indications which are due to Bad obstetric history, obstructed labour, twin pregnancy, oligohydramnios, placenta previa, scar dehiscence, malpresentation and unknown reasons. The rise in cesarian sections rate reflects changing trends of delivery because of change in socioeconomic status, some prefer cesarian sections delivery as an elective procedure, better skilled health professionals with best healthcare infrastructure and fear of litigation healthcare professionals.

## CONCLUSIONS

The most common clinical entity for cesarian section is of previous cesarian section and followed by cephalo pelvic disproportion. This has created a common clinical entity of 'previous cesarian section'. In subsequent pregnancy giving high risk pregnant status to the reference pregnancy.

This high risk cases are managed as emergency section as the against the ideal for than the elective cesarian section. Cases of primary cesarian section should be educated about need of ante-natal care. Need of last few visits to a tertiary level centre in order to decide the mode of delivery to undergo elective or emergency section in a centre both between equipped and manual. These estimates could be useful for precise counseling of patients and for clinical decision making prior to recommending primary cesarian section.

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