### **Original article:**

# Assessment of first LSCS cases in Indian population

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#### **Abstract:**

**Introduction:** The caesarean section epidemic is a reason for immediate concern and deserves serious international attention as the concept of right of every child to be physically, mentally & emotionally "well born" is fundamental to human dignity. However a balance has to be attained between the mortality and morbidity rates of the mother and the baby.

**Methodology:** The main source of data for this study were patients who were handled in PHC's, CHC's, private nursing homes, untrained dais and referred to us for further management.

**Results:** The major indication for emergency repeat caesarean delivery was fetal distress (60.5%), threatened scar rupture (48.75%) accounted for highest no in emergency repeat caesarean group, followed by CPD (18.75%), PIH (8.75%) and the other indications.

**Conclusion**: An expectant attitude and individualization with respect to the management of pregnancy and labour in post caesarean pregnancy is not only justifiable, but represents sound and conservative obstetrical practice.

Keywords: caesarean section

#### Introduction

The caesarean section epidemic is a reason for immediate concern and deserves serious international attention as the concept of right of every child to be physically, mentally & emotionally "well born" is fundamental to human dignity. However a balance has to be attained between the mortality and morbidity rates of the mother and the baby. Pandemic increase in caesarean delivery is occurring in all over the world in past three decades, there has been a striking increase in caesarean section rates in developing as well as in developed countries around the world. As the rate of caesarean delivery is increasing at an accelerated pace, there is increased rate of post caesarean pregnancy cases. Studies have shown that by encouraging the women with previous one caesarean section for a nonrecurrent cause can decrease this rise in caesarean section rate. Evidence suggests that there is significantly greater morbidity associated with a trial of labour compared with an elective caesarean section which will further affect the decision. <sup>2</sup>

## Methodology

The main source of data for this study were patients who were handled in PHC's, CHC's, private nursing homes, untrained dais and referred to us for further management.

The study was a cross sectional study conducted among 100 women admitted in the labour room in the Department of obstetrics & gynecology of Sri Siddhartha Medical College & Research Centre, Tumkur, as per fulfilling the inclusion and the exclusion criteria's as mentioned below.

Simple size: 100 cases

Type of study: Cross sectional study

Period of study: November 2011 to April

2013.

Duration of study: 1<sup>1/2</sup> year.

All term pregnant women with previous history of single uncomplicated lower segment caesarean section done for non recurrent indications with spontaneous onset of labour.

Women admitted in labour room as per the inclusion and the exclusion criteria's in department of obstetrics and gynecology of Sri Siddhartha Medical college and Hospital and Research centre Tumkur were included in this study.

### **Results and observations**

### TABLE 1 SHOWING INDICATIONS OF FIRST LSCS IN THE PRESENT STUDY:

Indications of primary LSCS:	Frequency	Percentage%
Ante partum hemorrhage	2	2%
Big baby	3	3%
Breech delivery	8	8%
Cephalo pelvic disproportion(CPD)	29	29%
Fetal distress	15	15%
Failed induction	5	5%
Mal presentation	5	5%
Non progress of labour	10	10%
Post dated pregnancy	2	2%
Pregnancy induced hypertension	13	13%
Placenta previa	1	1%
Pre mature rupture of membranes	7	7%
Total	100	100%

Above Table shows cephalo pelvic disproportion (CPD) was present in 29%, fetal distress in 15 % cases and pregnancy induced hypertension (PIH) in 13% cases. Thus the commonest indication of primary section was cephalo pelvic disproportion.

Table 2 SHOWING PLACE OF FIRST LSCS IN PRESENT STUDY:

Place of LSCS	No. of patients	Percentages %
Government institute (GI)	47	47.0
Non govt. institute (NGI)	53	53.0
Total	100	100.0

Above table showing that out of 100 cases 47 % of cases underwent primary caesarean section in a government institute and 53 % of cases in non government hospital's (private clinics etc).

TABLE 3 SHOWING INDICATIONS OF EMERGENCY REPEAT LSCS IN PRESENT PREGNANCY: (n=80)

Indications of Emergency repeat LSCS	Frequency	Percentage%
Fetal distress	50	62.5
Threatened scar rupture (TSR)	39	48.75
CPD (cephalo pelvic disproportion)	15	18.75
Pregnancy induced hypertension (PIH)	7	8.75
Cervical dystocia	1	1.25
Gestational diabetes mellitus (GDM)	2	2.5
In cordinate uterine action	2	2.5
Bad obstetric history (BOH )	2	2.5
Post dated pregnancy	1	1.25
Total	80	100

From the above table different indications for previous caesarean section is noted.

The major indication for emergency repeat caesarean delivery was fetal distress (60.5%), threatened scar rupture (48.75%) accounted for highest no in emergency repeat caesarean group, followed by CPD (18.75%), PIH (8.75%) and the other indications.

### Discussion

In the present study we have compared and evaluated various indications of emergency repeat caesarean section (EmRCS) as well as various parameters associated with mode of delivery in cases of previous one caesarean section handled in our hospital and cases those were referred to us for management. From the various studies done on post

caesarean pregnancy conclusion made so far is that cases with post caesarean pregnancy has increased in recent times in .One of the important reasons may be that its more liberalized for maternal as well as fetal interest.

In present study which was conducted in one of the tertiary referral centre of Tumkur, 100 cases of previous one caesarean section were studied, 52 % cases were booked at antenatal clinic and 48 % cases were un booked in our hospital. MOut of 2430 patients who delivered in our hospital during the present study period of one and half years, 80 term patients had a history of a prior one LSCS, accounting for 5.17 % of the total number of patients (table 1). This incidence is comparable to the recent study by Gonen and colleagues, in which 5.8% of the total number of patients who delivered had a history of prior caesarean delivery.<sup>3</sup> The overall rate of vaginal delivery following previous caesarean delivery, as reported in literature, varies from 28% to 51%. Landon et

al reported an incidence of 28.57% vaginal deliveries.<sup>4</sup>

Our study is comparable to this study, with 20% of the patients delivering vaginally (table 10). However, *Gonen* and colleagues in their study reported 51.22% of patients delivering vaginally. *Chattopadhyay* and colleagues reported an incidence of 40% and *Pickhardt* reported an incidence of 42%. <sup>5,6</sup> The probable reasons for the low rate of vaginal deliveries in our study were that, about 65 % of the patients were taken up for an EmRCS directly due to other obstetrical high risk factors and only 35 % of the patients who had a TOLAC, 57.14 % underwent successful trial after caesarean section and delivered vaginally.

#### Conclusion

An expectant attitude and individualization with respect to the management of pregnancy and labour in post caesarean pregnancy is not only justifiable, but represents sound and conservative obstetrical practice.

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