

**Original article:**

## **Evaluation of clinical conditions of previous caesarean scar : Analytical study**

**<sup>1</sup>Dr Hari Priya Roy , <sup>2</sup>Dr Pallawi Singh**

<sup>1</sup> MS, OB/GYN consultant, Roy Nursing Home , Muzaffarpur

<sup>2</sup> MS, OB/GYN Asst. Professor, Department of OB/GYN, SKMCH , Muzaffarpur

Corresponding author: Dr Pallawi Singh

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### **Abstract:**

**Introduction:** Present study was undertaken at Sri Sidhartha Medical College And Hospital and Research Centre. which is a rural based medical collage institute which is a tertiary referrel center which has a patient population mainly from low socio economic status and near by rural areas. With this view we studied the evaluation of clinical conditions of previous caesarean scar.

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

**Results:** Out of 80 cases that underwent repeat emergency LSCS (EmRCS) 92.5 % had normal uterine scar and 7.5 % cases had scar dehiscence and 1.25% case had scar rupture as noted intra operatively.

**Conclusion:** There was one case of uterine rupture in the present study which was referred to us from a very distant area and by the time she reached our hospital she had already developed signs of rupture uterus.

**Keywords:** LSCS , Pregnancy

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### **Introduction**

The justification of a caesarean section is difficult to prove, not only in economic terms, but also in terms of maternal satisfaction and fetal and maternal morbidity and mortality. In India, the obstetric practice in urban viv-a-vis rural setting presents a glaring dichotomy, possibly due to lack of infrastructure in the rural sector.<sup>1</sup>

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.<sup>2</sup> 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 non-recurrent 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>3</sup> Rupture of lower segment scar is much less common. It is evident that the uterine scar ruptures are more frequently seen following cases who has undergone trial of labour than in non-trial cases. The maternal risk is also

greater after repeat caesarean-section, hospital stay will be longer along with higher morbidity & fetal loss. Timing of caesarean-section is also important factor for further successful outcome.<sup>4</sup>

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#### **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.

#### **Inclusion criteria:**

All term pregnant women with previous history of single uncomplicated lower segment

caesarean section done for non recurrent indications with spontaneous onset of labour.

#### **Exclusion criteria:**

1. Women with any previous uterine scar due to myomectomy, hysterotomy operation and previous classical caesarean section , or scar due to previous rupture uterus repair.
2. Women with preterm premature rupture of membrane (PPROM).
3. Women with sepsis or chorioamnionitis
4. Women with intrauterine deaths.
5. Women with previous two or more lower segment caesarean section.
6. Women with induced labour.
7. Women with multiple pregnancies.
8. The cases in which informed and written consent are not obtained for this study.

#### **Collection of data:**

1. 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.
2. A detailed history, complete physical examination and assessment were done as per the proforma on all admitted cases.
3. Patients included in this study was done thoroughly explained regarding nature and the purpose of the study.

**Results:**

**TABLE NO 1 Showing intra-operative condition of uterine scar during repeat emergency LSCS: (n=80)**

Condition of uterine scar	No of cases	Percentages%
Normal scar	74	92.5
Scar dehiscence	6	7.5
Scar rupture	1	1.25
Total	80	100

Shown by above table out of 80 cases that underwent repeat emergency LSCS (EmRCS) 92.5 % had normal uterine scar and 7.5 % cases had scar dehiscence and 1.25% case had scar rupture as noted intra operatively.

**Table no. 2: Showing other intra-operative findings during repeat emergency LSCS: n=80**

Incidence	No. of Cases	Percentages%
Peritoneal adhesions	34	42.5
Omental adhesions	39	48.75
Flimsy adhesions	13	16.25
Thinned out lower uterine segment	15	18.75
Bowel adhesions & Bladder advancement	31	38.75

As shown in above table out of 80 cases that underwent emergency repeat caesarean section (EmRCS) intra operatively maximum cases had omental adhesions (48.75%) followed by peritoneal adhesions (42.5%) and bladder adhesions & advancements (38.75%).

**Discussion:**

Among women with one prior caesarean delivery undergoing a subsequent trial of labour, those with a prior vaginal delivery were at substantially lower risk of threatened scar rupture (0.2 %) than with women

without a previous vaginal delivery (1.1 %), *Carolyn Zelop et al* (2000).57.14 % of patients had a successful VBAC in the present study, which is lower than that in other studies . Landon and associates reported a success rate for vaginal delivery of 73.41% and *Gonen et al* reported a success rate of 79.66%.<sup>5,6</sup>. *Cowen* and colleagues reported a successful VBAC of 81%.<sup>21</sup> The probable reasons for a low rate of successful VBAC in our study were that :-

Only 15 % of the patients who underwent trial for VBAC had a history of prior vaginal

deliveries as compared to 50% of the patients in the study by *Landon* and colleagues and 42.20% of the patients in the study by *Gonen et al.*<sup>6,7</sup>

About 43 % of the patient's, that had an unsuccessful TOLAC, were taken up for a EmRCS in view fetal distress, early in labour. In the present study, 20 % of the patients who delivered vaginally, 40 % underwent instrumental (either ventouse or forceps assisted) vaginal delivery. *Allahabadia* and colleagues reported use of forceps in 21.30% of their patients.<sup>8</sup>

#### **Conclusion:**

There was one case of uterine rupture in the present study which was referred to us from a very distant area and by the time she reached our hospital she had already developed signs of rupture uterus, however she was taken up for EmRCS immediately but intra operatively there was clear cut picture of rupture uterus, which was repaired further in two layers without much difficulty and complete hemostasis was achieved post operatively two units of fresh blood transfusion was done.

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