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### A STUDY ON VAGINAL BIRTH AFTER CESAREAN SECTION



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# **ABSTRACT**

Introduction: Rate of primary cesarean section is increasing, majority of these cases are becoming repeat cesarean section.

Aims: This study was done to analyze the success rate of trial of labour after cesarean (TOLAC) with respect to indication of previous caeserean section and indication of repeat caeserean section in patients with previous one LSCS.

Materials and Methods: This is a prospective observational study carried out in a tertiary care teaching institute Mahila Chikitsalaya ,SMS medical college, Jaipur for a period of one year from june 2015 to May 2016. Total 50 cases were selected.

Results: In this study, success rate of trial of labour in previous one LSCS was 54 %. There was no rupture of uterus in our study. There was no maternal or neonatal mortility.

Conclusion: Majority of previous LSCS can be safely delivered vaginally without major complication to mother or newborn in appropriately selected cases.

## **KEYWORDS**

Lower segment cesarean section, Trial of labor after cesarean, Vaginal birth after cesarean section

#### INTRODUCTION

In 1916, Cragin popularized the dictum, "once a cesarean section, always a cesarean section". It was belief that "one a cesarean always a cesarean". Earlier cesarean section was classical or upper segment cesarean, in which chances of uterine scar rupture was very high. But now a days, lscs was being done commonly. Rupture of lower segment scar is much less common compared to upper segment cesarean scar. So patient with previous cesarean section for non recurring indication can be given trial of labour if there in no contraindication of vaginal delivery. Incidence of scar rupture is very low. Strength of the scar can

So patient with previous cesarean section for non recurring indication can be given trial of labour if there in no contraindication of vaginal delivery. Incidence of scar rupture is very low. Strength of the scar can not completely assessed . it recquire supervision of the senior obstetrician during the labour. This study was conducted to assess the success and safety of VBAC in previous one LSCS.

## MATERIALS AND METHODS

This is a prospective observational study carried out in a tertiary care teaching institute Mahila Chikitsalaya ,SMS medical college, jaipur for a period of one year from june 2015 to May 2016. Total 50 cases of a previous CESAREAN SECTION that fulfilled the selection criteria were enrolled in the study.

Those patients with cervical dilatation of >3cm were augmented with oxytocin and remaining cases were induced with single instillation of cerviprim gel 0.5 mg intracervically after an informed consent. Partogram was maintained. The trial of vaginal delivery was continued till there was satisfactory progress. The trial was terminated by emergency repeat CESAREAN SECTION, when there was evidence of unsatisfactory progress, scar tenderness or fetal distress.

## Selection criteria Inclusion criteria

- All patients with previous 1 LSCS for a non-recurrent indication.
- Patient willing for VBAC and giving consent.

### Exclusion criteria

- · Previous classical incision on the uterus.
- · Previous two or more LSCSs, with other uterine scars.
- History of previous rupture of the uterus or scar dehiscence.
- · Contracted pelvis.
- · other medical or obstetrical complications.

Table - 1 Mode of delivery following trial of vaginal birth after cesarean section

Mode of delivery	No. of cases(n=50)	percentage
Spontaneous vaginal delivery	27	54
Repeat lower segment caeserian section	23	46

In the present study, 27 (54%) patients underwent successful VBAC while 23 (46%) patients had to undergo repeat LSCS due to failed vaginal trial of labour.

Table - 2 Indication of previous cesarean section and result of TOLAC in present pregnancy

s.no.	Indication of previous	No. of	Successful	Emergency
	caeserian section	cases (n=50)	TOLAC (n=32) (%)	lscs (n=18) (%)
1	Foetal distress	9	8 (88.9)	1 (11.1)
2	Cephalopelvic disproportion	4	3 (75)	1 (25)
3	Breech	5	4 (80)	1 (20)
4	Failed induction	11	4 (36.4)	7 (63.6)
5	Non progress of labour	14	2 (14.3)	12 (85.7)
6	Oligohydramnios	7	6 (85.7)	

8~(88.9%) patients with previous indication of foetal distress had successful outcome in trial of labour. While in 12 (85.7%) patients with previous indication of NPOL had to undergo emergency LSCS .

7 (63.6%) patients with previous indication of failed induction showed failure of TOLAC in this study.

Table - 3 Indication of repeat emergency LSCS in cases of failed trial of  $VBAC\,$ 

s.no.	Indication of repeat	No. of cases	Percentage
	caeserian section	(n=18)	
1	Foetal distress	9	50
2	Scar dehiscence	6	33.33
3	Non progress of labour	3	16.67

It was observed that in the present study, indication of repeat CESAREAN SECTION was foetal distress 9(50%) cases, scar dehiscence in 6(33%) cases and non progress of labour 3(17%) cases.

Similarily Bangal, et al<sup>2</sup>. found that indication of repeat emergency LSCS was foetal distress in 46.66 % cases. Second common indication 13.34 % cases was scar dehiscence in their study.

### DISCUSSION

There are two basic choice regarding Planning the delivery for the women with previous cesarean section. First is a trial of labour after cesarean (TOLAC) with goal of acheiving . if cesarean section becomes necessary during the trial, then it is termed a "failed trial of labour." second choice is elective repeat cesarean delivery (ERCD). This included scheduled cesarean delivery and unscheduled but

planned cesarean delivery for spontaneous labor or another indication.

The success of TOLAC in the present study was 54%. This result was comparable with the results of other studies reported by Ray, et (Bengal) al <sup>3</sup>. Ray, et al <sup>3</sup> find 53.57 % has successful vaginal delivery rate. Knight et al. <sup>4</sup> and Bangal VB et al <sup>5</sup>. found 63.4% & 75 % successful trial of labour respectively.

In our study, the rate of failed trial of labour was 46% and commonest indication for repeat caesarean section was fetal distress.

In the present study, the success rate of TOLAC in previous cesarean section indication of fetal distress cases was 89%. Similarily Bangal, et al<sup>2</sup>. found 83.33 % success with foetal distress indication.

Similar results (68%) successful TOLAC reported by Hoskins and Gomez et al<sup>6</sup> when fetal distress was the indication of previous caeserean section. In this study, the success of TOLAC in cases with a previous cesarean section done for breech presentation was 80%. Studies by Bangal, et al<sup>2</sup>. had reported similar results.

In the present study, the incidence of scar dehiscence was 0 and there was no maternal and neonatal mortality in this study.

#### CONCLUSION

Majority of previous caesarean section can be safely delivered vaginally without major complication to mother or newborn in appropriately selected cases. There is need of proper counseling for trial of labour in previous caeserean section. This will reduce the repeat elective caeserean section.

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