

Outcome of trial of Labour after Previous one Caesarian Section

Parveen Naveed, Saima Perveen

ABSTRACT

Background: All over the world, the concern about the increasing rate of caesarean delivery has focused on trial of labour after caesarean section (TOLAC) or Vaginal Birth after Caesarean (VBAC). An important consideration while contemplating trial of labour after caesarean is the risk of uterine rupture. Because of concerns about this complication, the rate of attempted TOLAC continues to fall all over the world.

Objective: To study the outcome of trial of labour in patients with previous one cesarean section.

Material & Methods: It was a prospective observational study conducted from 1st June 2017 to 31st December 2017, in OBS & Gynea unit of Saidu Teaching Hospital, Swat. All pregnant women of more than 37 weeks gestation, with one previous caesarean section were screened for eligibility criteria for trial of labour. The data obtained were analyzed according to mode and outcome of labour and was then subjected to statistical analysis on SPSS version 20.

Results: A total of 281 deliveries were carried out. Out of the 281 women, 63.90% (n=80) had normal delivery, 35.50% (n=47) underwent emergency c/section while 154 had ELCS done and were excluded from the study, thus making a success rate of 63% for TOLAC for the study population.

Conclusion: TOLAC should be considered in women in low resource setting after thorough assessment and proper counseling of patient. Good patient selection and appropriate one to one surveillance are important steps of successful TOLAC.

Key Words: Vaginal birth after cesarean section, Trial of labour after cesarean section

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INTRODUCTION

All over the world, the concern about the increasing rate of caesarean delivery, has focused on trial of labour after caesarean section (TOLAC) or Vaginal Birth after Caesarean (VBAC).¹⁻³ An important consideration while contemplating trial of labour after caesarean is the risk of uterine rupture.^{4,5} Because of concerns about this complication, the rate of attempted TOLAC continues to fall all over the world.⁶⁻⁷

However, practice of multiple repeat cesareans is also not without risk as complications such as morbidly adherent placenta (placenta praevia, accreta), increase with the increasing number of prior caesarean deliveries.⁸ Also, the absolute risk of uterine rupture is low and the latest guidelines recommend that most women with one prior low transverse caesarean scar should be offered trial of labour (ACOG 2010).⁹

It is therefore important to identify women who may be at an increased risk of an adverse event if TOLAC is attempted. Therefore, selection criteria should be established in order to minimize the risk.

OBS & Gynea Unit, STH/SMC, Swat

*Correspondence: Dr Saima Perveen
Assistant Professor
OBS & Gynea Unit, STH, Swat
Cell: 03339144880
Email: drhadi78@gmail.com*

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TOLAC is a safe practice provided the candidates are appropriately selected.¹⁰⁻¹³

The majority of studies concerning the success or failure rate of TOLAC are from the developed world.^{14,15} The set standards of practice that have resulted from these studies might not be applicable in the developing world where electronic fetal monitoring or 1:1 doctor/nurse patient ratio may not be available for women undergoing TOLAC.^{16,17} Thus, the present study was carried out to assess the factors affecting trial of labour after one caesarian section and the outcome of TOLAC in the busy setup of Gynae unit of Saidu teaching Hospital Swat.

MATERIALS AND METHODS

The study was conducted at OBS & Gynae Unit Saidu Teaching Hospital Swat. It was a prospective observational study conducted from 1st June 2017 to 31st December 2017. All pregnant women of more than 37 weeks gestation, with one previous caesarean section were screened for eligibility criteria for trial of labour.

A complete history, including indication of previous caesarean, perioperative complications during previous surgery and details of present pregnancy were noted. Inclusion criteria included singleton pregnancy, gestational age 37 weeks, cephalic presentation, one previous low transverse caesarean section and non-recurrent indication of previous caesarean. Women having two previous LSCS, previous myomectomy, classical caesarean, mal-presentation and placenta praevia were excluded from the study.

In women undergoing TOLAC, half-hourly recording of maternal vital parameters (Pulse Rate, Blood Pressure) were done. Fetal heart rate was monitored by intermittent auscultation every 15 min in first stage and every 5 min during second stage as per ACOG guidelines. A close watch for early recognition of scar dehiscence was kept by identifying maternal tachycardia, vaginal bleeding, scar tenderness or fetal distress. Attempt at vaginal delivery was abandoned if there was any suspicion of scar dehiscence, unsatisfactory progress of labour or fetal distress. The labour was terminated by operative vaginal delivery (forceps/vacuum) or emergency LSCS according to dilatation of cervix and station of fetal head.

RESULTS

A total of 281 deliveries were carried out. Out of the 281 women, 63.90% (n=80) had normal delivery, 35.50% (n=47) underwent emergency c/section while 154 had ELCS done and were excluded from the study, thus making a success rate of 63% for TOLAC for the study population. Study population is broadly categorized in Fig 01. Outcome of TOLAC was 63.90% (Fig. 02). In successful VBAC, the mode of delivery is given in table 01.

Fig. 01: Study Population

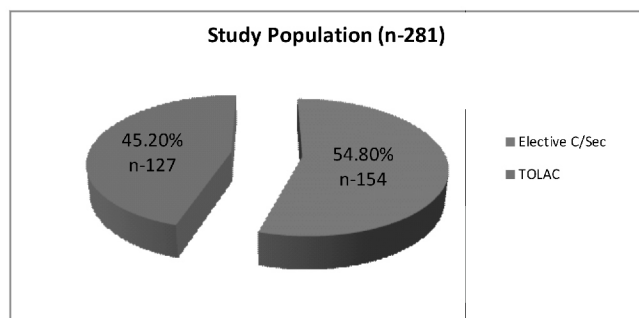
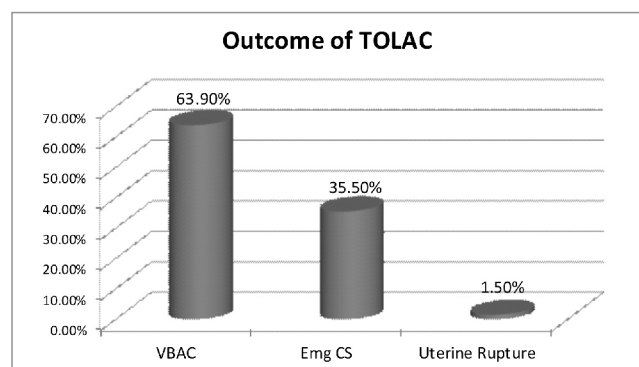


Fig. 02: Outcome of TOLAC



DISCUSSION

There has been a sharp increase in rate of caesarean sections all over the world. This increase is due to multiple factors, including a rise in the rate of primary caesarean sections and decline in the rate of VBAC from 28.3% in 1996 to 8.5% in 2006.¹⁵ Our hospital is a tertiary care and referral centre which caters for approximately 7000 deliveries/year, with a caesarean section rate of around 19%.¹³

TOLAC or VBAC is a safe option of decreasing caesarean delivery rate in properly selected candidates.

The majority of studies from the developed world have shown a 60-80% success rate of TOLAC¹⁰ as compared to 63% in our study. Studies from the developing world have shown varied success rate of VBAC, i.e. 42.4% in South Africa,² 57% in Bloemfontein¹¹; 41.7% in Saudi Arabia¹³ and 60% in India.⁷ In my study the rate of spontaneous vaginal delivery is 48% while forcep delivery is 7.9% and vacuum vaginal delivery is 17.3%. In study conducted by Ayub et al¹⁷ rate of spontaneous vaginal delivery is 67.2%, forcep delivery is 7% and vacuum vaginal delivery is 5.2%. The difference may be because of higher number of patients in our hospital and less resources.

In present study, the frequency of complication were same as studies done in other areas. In my study the number of patient who had scar dehiscence was 2 and one case of rupture uterus. It was the same as study done by Ayub et al¹⁷ in Abbotabad with three patients of scar dehiscence and one case of rupture uterus.

CONCLUSION

Patients with spontaneous onset of labour should be encouraged for trial of labour after caesarean delivery. TOLAC should be considered in women in low resource setting after thorough assessment and proper counseling of patient. Good patient selection and appropriate one to one surveillance are important steps of successful TOLAC. However, an individualized approach is needed for every woman based upon prevailing circumstances and the facilities available.

Declaration of interest:

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

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