

Original Article

Trial of Labour after one Caesarean Section-Five year Experience in a Tertiary Care Hospital, Quetta

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Abstract

Objectives: To observe frequency and outcome of trial of labour after one caesarean section.

Methodology: This retrospective analytical study was conducted at Department of Obstetrics and Gynecology unit-4 Bolan Medical Complex Hospital, Quetta, from 1st January 2012 to 31st December, 2016, included review of clinical records of all patients who were previous one caesarean section and came in emergency for delivery and given trial of labor for vaginal delivery. These included booked, un-booked as well referred cases.

Results: Out of 33,396 total births, 943 (2.8%) patients were with the previous 1 caesarean section. 480 (50.9%) patients were given trial for vaginal delivery. Out of which 290(60.4%) delivered vaginally and 190 (40.6%) underwent repeat caesarean section. 174(60%) of patients were multipara who delivered vaginally. The birth weight of baby were between 2.5 to 3.5kg in 90% Of vaginal deliveries after caesarean section.

Conclusion: Vaginal birth after cesarean section has a high success rate and it should be considered as an option in patients with previous one cesarean delivery.

Keywords: Trial of labour, Multiparty, Birth weight, Repeat caesarean section.

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Introduction

Cesarean delivery (CD) once adopted in conditions where vaginal delivery was almost impossible has now become one of the most common surgical procedures worldwide. Though it has helped save many mothers and babies from morbidities and mortalities, it is not at all the safest route of delivery as it is being marketed. The rate of cesarean section has increased many folds over the last few years mainly due to primary cesarean sections and repeat cesareans. There is a major discrepancy between public and private hospitals. The later has become a major contributor in the rise of cesarean delivery especially primary.^{1,2}

This increase in CD rate has arrived with a whole new set of complications and their long term implications on

maternal and fetal health. The complications include hemorrhage requiring massive transfusion, morbidly adherent placenta especially percreta, bladder and ureteric injuries, uterine rupture, hysterectomy and even maternal death. Even many years later if a patient undergoes a pelvic surgery for other indication, the adhesions a cesarean may have caused makes it a difficult procedure and unwanted, unprecedented complications.^{1,2,3}

In our society there is a trend of having more children mainly males. Gender bias is a norm in the society. Therefore, vaginal birth after Cesarean (VBAC) is an acceptable option for many patients with no absolute indication for CD. It is successful in 60-80% of patients

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who opt for trial of labour after cesarean (TOLAC). It is a reasonable and safe choice for mothers as there is emerging evidence of grave complications due to multiple CD. Clinicians may favour elective repeat cesarean delivery (ERCD) over the trial of labour due to litigation fear but the patient should not be deprived of the choice of vaginal delivery due to personal anxiety. VBAC is very cost effective and patient satisfaction is very high.^{4,5,6}

Methodology

This retrospective analytical study was conducted in the department of obstetrics & gynecology unit-4, BMCH. The clinical records of all the patients who were given trial of labor after one caesarean section during the study period, were obtained from the registers of labor ward and operation theater. These records were in the form of the hard copy present in the record room of the unit-4. Data was subsequently recorded in Microsoft Excel 2013 and analyzed using descriptive statistics.

Results

Total no of deliveries in the study period were 33,396, out of this 2849(8.5%) delivered by emergency caesarean section. A total number of 943(2.8%) with the previous one LSCS patients came in emergency. All patients had spontaneous onset of labor including women having the unmonitored trial of labor outside the hospital. All patients were thoroughly assessed for any contraindication for vaginal delivery and 480(50.9%) patients were given trial for vaginal delivery. Out of these 480 cases, 290(60.4%) were delivered vaginally and 190(39.6%) cases by emergency repeat caesarean section due to failed trial of labor. Most of the patients were non-booked.

Table I shows the parity of both successful VBAC and emergency repeat LSCS. 174(60%) patients who had successful VBAC were multipara and 116(40%) were para one while 67(35.3%) patients in repeat emergency caesarean section were multipara and 123(64.7%) were para one. 55(19%) of a successful trial of labor had previous VBACs and it also shows that 220(75%) of babies had birth weight of 2.5 to 3 kg in patients with successful VBAC and 135(71%) in repeat emergency LSCS patients. 44(15%) babies were between 3.1 to 3.5 kg in successful VBAC group and 39(20.5%) babies in repeat emergency LSCS group. 16(8%) babies had more than 3.5 kg in repeat emergency CS and 15(5%) in vaginally delivered cases, out of which 12(4%)

babies were more than 4 kg. There was one set of twins having the weight of 2 kg each and one set of triplets having weight of 1.5 kg each delivered vaginally. Three patients of the breech presentation delivered vaginally, two were attempted home delivery with stuck head and one IUD. Out of 293 babies of vaginal deliveries, all were alive except 14 were confirmed IUDs before trial of labor, two still births of stuck head of home delivery. There were 5 NNDs due to prematurity, while repeat emergency CS done on 7 IUDs due to failed trial of labor. Rupture uterus in the previous one CS, which came in emergency and trial taken outside the hospital were 30(6.25%). Scar dehiscence was seen in 18(9.5%) cases.

The indications of emergency sections were due to scar tenderness 150 (79%), fetal distress 12(6%) and non progress of labor 28(15%) as shown in figure 1.

Parity	VBAC(n=290)	LSCS (n=190)
P1	116 (40%)	123 (64.7%)
P2	58 (20%)	18 (9.5%)
P3	38 (13.1%)	10 (5.2%)
≥ P4	78 (26.9%)	39 (20.5%)
weight of baby	(n=293)	(n=190)
<2.5 kg	14(2.8%)	0
2.5-3 kg	220(75%)	135(71%)
3.1-3.5kg	44(15%)	39(20.5%)
3.6-4kg	3(1%)	13(6.8)
>4kg	12(4.1%)	3(1.6%)
Scar dehiscence	0	18(9.5%)

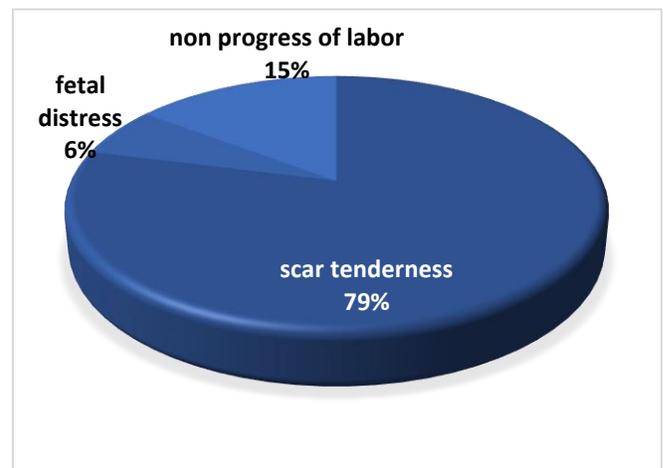


Figure 1. Indications of Emergency LSCS (n=190)

Discussion

Cesarean section is a lifesaving procedure for mother and baby but it is not free of complications. It saves a

life today to take it some other day if not managed and assessed properly. VBAC is successful with proper patient selection and in equipped setup.⁷ Different studies have shown a success rate of 60-85%.^{8,9} We chose 50.9% of patients for TOLAC. 60.4% had VBAC whereas 39.6% had an emergency cesarean. It is lesser than Bangal VB et al⁹ and Seffah JD et al¹⁰ as most of our patients were unbooked. They had taken trial outside the hospital with the use of drugs and therefore presented in a serious condition.

In patients with successful VBAC, 60% were multiparas and 40% were para one. Success was related to the interval between pregnancies, previous section by a consultant-no history of infection or complications in previous surgery. The previous CD is now a primary indication in approximately 30% cases.¹¹

Weight plays a role in the success of TOLAC. 75% of our patients had weight 2.5-3.0 kg. Anwar S et al¹² 59% having weight 2.5-3.0 kg. Bangal VB et al⁹ consider a weight of more than 3.0 kg as a risk factor for failed TOLAC.

The indications that turned TOLAC into the emergency section were scar tenderness in 79%, fetal distress in 6% and non-progress of labour mainly due to cephalopelvic disproportion in 15%. Bangal VB et al⁹ had to do repeat cesarean because of fetal distress in 46%, scar tenderness in 13% and cephalopelvic disproportion in 13%.

A VBAC carries the risk of 22-74/10,000 uterine rupture.¹³ In our study 6.25% patients presented with a ruptured uterus. All of them had taken trial either at home or with traditional birth attendants. Syntocinon and misoprostol were used in those patients. None of our patient uterus ruptured in a hospital managed TOLAC. There the rule of once a cesarean always a hospital delivery should be followed to prevent preventable complications.

The patients in whom trial failed and cesarean was decided, it was found that 9.5% had scar dehiscence. Whereas Khero RB et al¹⁴ reported scar dehiscence in only 0.92% of patients.

Considering the complications faced by mothers due to cesarean sections, VBAC should be discussed with the patient during her antenatal visits.^{15,16} The complications not only increase with a number of sections but also become more serious. Placenta accrete range from 0.2% to 6.7% as the number of sections increase. Similarly, hysterectomy range from

0.7%-9.0% from single to multiple sections.^{13,17} The primary CD needs to be revisited and reduced. There is a great discrepancy between private and public hospitals. Private hospitals are one of the major causes of increased primary CD.^{18,19} They need to be audited. Most of the patients who presented to us were refused a VBAC by the private sector. It's something that needs a serious approach.

Conclusion

VBAC is a very reasonable and cost effective option to patients with a non recurrent indication for CD. It has very low complication rates as compared to CD when attempted in a hospital. Denying patients, the option of delivering vaginally makes them end up in taking trial in an unattended environment and hence resulting in serious complications. They should be counseled in the antenatal period about their birthing options to have a satisfactory outcome.

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