

FREQUENCY OF VAGINAL BIRTH AFTER CESAREAN SECTION

Dr. Rida Fatima^{*1}, Dr. Taskeen Faisal² and Dr. Usama Afzal³

Pakistan.

***Corresponding Author: Dr. Rida Fatima**

Pakistan.

DOI: <https://doi.org/10.17605/OSF.IO/BSMUQ>

Article Received on 21/10/2020

Article Revised on 11/11/2020

Article Accepted on 01/12/2020

ABSTRACT

Once a cesarean, always a cesarean, this statement reflected most of US obstetricians' management of patients with a prior cesarean delivery. Although attempts at a trial of labor after a cesarean birth (TOLAC) have become accepted practice, the rate of successful vaginal birth after cesarean delivery (VBAC), as well as the rate of attempted VBACs, has decreased during the past 10 years. A total of 167 patients were included in this study. The mean age of the patients was 30.12±2.36 years. The mean inter pregnancy interval was 1.56±0.45 years. All the patients underwent trial of labor. Sixty-six patients (39.52%) patients were shifted for section due to certain reasons i.e. scar tenderness, fetal distress, malpresentation etc. The rest of the patient were delivered vaginally i.e. 101 patients (60.47%).

KEYWORDS: Vaginal Birth after Cesarean Delivery (VBAC), Cesarean Section.**INTRODUCTION**

"Once a cesarean, always a cesarean." From 1916, when these words were spoken to the New York Association of Obstetricians & Gynecologists, through the ensuing 5060 years, this statement reflected most of US obstetricians' management of patients with a prior cesarean delivery. By 1988, the overall cesarean delivery rate was 25%, rising from less than 5% in the early 1970s. Only 3% of live-born infants were delivered vaginally after the mother had undergone a prior cesarean delivery.^[1,2]

Although attempts at a trial of labor after a cesarean birth (TOLAC) have become accepted practice, the rate of successful vaginal birth after cesarean delivery (VBAC), as well as the rate of attempted VBACs, has decreased during the past 10 years. Whereas 40-50% of women attempted VBAC in 1996, as few as 20% of patients with a prior cesarean delivery attempted a trial of labor in 2002. This number is drifting down toward the 10% mark with fewer than 10% of women achieving successful VBAC in 2005.^[1,3] Studies have shown that women with one previous CS who undergo induction of labor (IOL) have lower success rates of vaginal delivery compared with those who presented in spontaneous labor. Women who had a previous successful VBAC have the best chance to deliver vaginally with success rate of 85%–90%. Other prognostic variables include maternal age <40 years, ethnicity, body mass index (BMI) <30, gestational age <40 weeks, infant birth weight <4 kg, and higher admission bishop score. Success rate of VBAC correlates with the indication of the previous CS; CS for fetal malpresentation had higher

success rate (84%) compared with CS for either labor dystocia (64%) or fetal distress (73%).^[4,5]

MATERIAL AND METHODS

This retrospective cross-sectional study was conducted in Gynae & Obs. Department of different hospitals. Data of all the patients undergoing trial of labor by a senior postgraduate resident after one previous cesarean section were included in this study. Brief history of the patients i.e. name, maternal age, number of pregnancies, interpregnancy time interval, reason for previous section etc. was noted on a predefined proforma. The data was entered and analyzed in MedCalc software. Relevant statistical analysis was performed. The qualitative variables were presented as frequency and percentages. The quantitative variables were presented as mean and standard deviation.

RESULTS

A total of 167 patients were included in this study. The mean age of the patients was 30.12±2.36 years, with the minimum age of 23 years and maximum age of 38 years. The maximum no. of pregnancies was five and the minimum was 2. The mean interpregnancy interval was 1.56±0.45 years. All the patients underwent trial of labor. Sixty-six patients (39.52%) patients were shifted for section due to certain reasons i.e. scar tenderness, fetal distress, malpresentation etc. The rest of the patient were delivered vaginally i.e. 101 patients (60.47%).

DISCUSSION

With the significant rise in the incidence of primary CS for various indications, an increasing proportion of the pregnant women coming for antenatal care report with a history of a previous CS. These women belong to a high-risk group due to the risk of a scar rupture. The obstetrician is always in a dilemma regarding the mode of delivery in these cases. Assessment of the individual case with regard to the possibility of a successful VBAC is necessary while taking the decision. The unending dilemma of an obstetrician is about the management of subsequent labor, once the patient has a scar on the uterus. Some suggest an elective CS for such cases, whereas others choose a trial of labor. Many take a middle route, that is, individualization of case. Increased age decreases the likelihood of VBAC. Women with advanced age were more likely to fail to VBAC, which was also supported by Eden et al.^[6]

Age ≥ 40 years-old is also a risk for uterine rupture when women undertook TOLAC.^[7] So, younger women, especially those < 35 -years-old, are more likely to have a successful and safe VBAC. Maternal obesity carries the risk for many obstetric complications including macrosomia and increased risk of CS. Both obesity and macrosomia have negative impacts on VBAC success. When comparing cases where obesity occurred at prepregnancy or at admission before delivery, the trends are similar. Faucett et al. found that women with obesity were more likely to undergo emergency cesarean for an arrest disorder before achieving active labor despite having more clinical interventions to achieve a vaginal birth. A better understanding of the mechanisms by which maternal obesity affects the progression of labor, might help to increase the rates of successful VBAC among this population. Maternal obesity was also associated with a high risk of uterine dehiscence or rupture at term gestation among women with previous CS. Therefore, appropriate weight and weight gain during pregnancy are vital for maternal health.^[8-10]

REFERENCES

1. Aaron B Caughey ABC. Vaginal Birth After Cesarean Delivery: Medscape; 2018 [updated, May 11; cited 2020 July 12]. Available from: <https://emedicine.medscape.com/article/272187overview>, 2018.
2. Flamm BL. Once a cesarean, always a controversy. *Obstetrics and Gynecology*, 1997; 90(2): 312-5.
3. Sadan O, Leshno M, Gottreich A, Dishy M, Golan A, Lurie S. Once a cesarean always a cesarean?-A computer-assisted decision analysis. *American Journal of Obstetrics & Gynecology*, 2006; 195(6): S113.
4. Kiwan R, Al Qahtani N. Outcome of vaginal birth after cesarean section: A retrospective comparative analysis of spontaneous versus induced labor in women with one previous cesarean section. *Annals of African medicine*, 2018; 17(3): 145.
5. Landon MB, Leindecker S, Spong CY, Hauth JC, Bloom S, Varner MW, et al. The MFMU Cesarean Registry: factors affecting the success of trial of labor after previous cesarean delivery. *American journal of obstetrics and gynecology*, 2005; 193(3): 1016-23.
6. Eden KB, McDonagh M, Denman MA, Marshall N, Emeis C, Fu R, et al. New insights on vaginal birth after cesarean: can it be predicted? *Obstetrics & Gynecology*, 2010; 116(4): 967-81.
7. Hidalgo-Lopezosa P, Hidalgo-Maestre M. Risk of uterine rupture in vaginal birth after cesarean: Systematic review. *Enfermería Clínica (English Edition)*, 2017; 27(1): 28-39.
8. Faucett AM, Allshouse AA, Donnelly M, Metz TD. Do obese women receive the necessary interventions to achieve vaginal birth after cesarean? *American journal of perinatology*, 2016; 33(10): 991-7.
9. Hibbard JU, Gilbert S, Landon MB, Hauth JC, Leveno KJ, Spong CY, et al. Trial of labor or repeat cesarean delivery in women with morbid obesity and previous cesarean delivery. *Obstetrics & Gynecology*, 2006; 108(1): 125-33.
10. Wu Y, Ming W-K, Wang D, Chen H, Li Z, Wang Z. Using appropriate pre-pregnancy body mass index cut points for obesity in the Chinese population: a retrospective cohort study. *Reproductive Biology and Endocrinology*, 2018; 16(1): 77.