ORIGINAL ARTICLE

Association of Previous Vaginal Birth with VBAC (Vaginal Birth after C-Sections)

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ABSTRACT

Background: The advent of painless birth with Caesarean section rate is increasing day by day. This raise the clinical suspicion that should a patient with previous scar uterus should given trial of labor or not as more than 50% caesarean section are done due to previous caesarean sections. Previous obstetrical history especially history of previous normal vaginal birth increases her chances of successful VBAC. It is evident that patient with pervious history of normal deliveries encourages to have trial of scar, as she has increase chances of having an eventful VBAC, in comparison with those patients who have no history of vaginal birth previously.
Aim: Assessment of comparison between normal birth (vaginal) with VBAC.
Study design: It is a descriptive comparative study
Methods: It is conducted in six month duration in Nawaz Shareef social security hospital, from 1march 2017 to 30 September 2017. 200 patient are being assessed for trial of scar. They are divided in two group. Those patient who are given trial of scar with history of previous vaginal birth (Group I). Those patient who were given trial of scar with no previous vaginal birth (Group II). In both group no induction is given. Those patient who came in spontaneous labor are assessed for trial of scar, with continuous monitoring with CTG, and all facilities for caesarean section if needed.
Results: There is definitely much higher association of successful VBAC in patient with previous history of normal vaginal birth that is 76% as compare to 34% among patients who were given up trial of scar with no history of normal vaginal birth. This study clearly reflect that there is strong association between successful VBAC with previous history of normal vaginal birth. All patient who came in routine antenatal checkup, should be encouraged for trial of scar after one caesarean section provided her all parameter are full filled. These patient must be informed that they are saved from all the complication of operative delivery if they have successful VBAC.
Conclusion: Caesarean section rate are increasing day by day and repeat caesarean section increase chances of maternal morbidity and mortality, in term of hospital stay, blood transfusion, increase chances of placenta previa ,placenta acreta and definitely caesarean hysterectomy.
So patient are properly councelled during their antenatal visits, those who have previous one caesarean section, whether previous history of vaginal birth or not should be encourged for trial of scar, as more than 85% chances of successful VBAC, if they are properly selected
Keywords: Successful VBAC, Unsuccessful VBAC, ERCS (Elective repeat caesarean section)

INTRODUCTION

With ever increase comfort due to advancement in medical science, the trend of caesarean section is on a rent less increase. The average percentage of repeated caesarean section has grown almost by 50% while the same number of percentage that is 50% accounts for different cases in breech presentation and fetal distress.
The option of VBAC is relatively a safe option in a larger group of patients. This helps a larger group of patients from the unnecessary trial of vaginal birth after a previous history of caesarean section, though many researcher still support the vaginal birth in a few cases.
The literature is of view that average success of VBAC is remarkably high in appropriate selected cases and the average percentage of the successful cases varies between 50% and 80%.

Predictor of successful VBAC include history of percentage of patients who had VBAC before, patients with history of normal vaginal birth and inter pregnancy interval. The success predictors in all such cases varies from 86-89% in percentage.

The type of scar in caesarean section from classical to transverse incision, not only decrease the operative morbidity and mortality but it increase the chance of trial of scar in future delivery. Number of factors are indicator of success of VBAC, like interval between last caesarean section and what is indication of last caesarean section and this time she went into spontaneous labor or not.

Those patient who have an old history of vaginal birth have a greater percentage of successful VBAC as compared to those with no history of vaginal birth.

MATERIAL AND METHODS

Total 200 patient are included in this group for trial of scar, in Nawaz Shareef Social security hospital, between march to September 2017. They are divided in two groups
Group I: Patient with normal vaginal birth history given trial of scar.

Group II: Patient with no vaginal birth history given trial of scar.

Before giving the trial of scar, patient antennal record is properly reviewed, like interval between last caesarean section and current pregnancy, indication of caesarean section , postoperative follow up. Consent for trial of scar are being signed and all services for immediate caesarean section are provided if need arise during trial of scar.

Patient are being continuously monitored in labor room for trial of scar with Partogram and CTG and kept for low threshold for caesarean section.

RESULTS

Study is conducted in one year duration in Nawaz Sareef Social security hospital, and results are as follows
Mean age of patient was 30.3+_ 2.9 in group segregated as GROUP-A and 31.1+ 2.6 in group segregated as group B.

Table 1: Group distribution by age (n=200)

Age(years)	**GROUP I**	**GROUP II**
	Having history of previous vaginal birth	Having No previous history of previous vaginal birth
25-30	56	47
31-35	44	53
Total	100	100
Mean+SD	30.3+2.9	31.1+2.6

Table 2: Group distribution by parity (n=200)

Parity	Group I	Group II
Gravida 2-4	96	71
Gravida 5-6	04	29
Para 1-3	100	90
Para 4-5	-	10

Table 3: Distribution of cases by vaginal birth after caesarean section (VBAC)

Patients with Successful VBAC, having vaginal birth	Patients with Successful VBAC, having no history of vaginal birth
76	35
76%	35%

Group l, out of hundred patient 76% had successful VBAC, in patient with previous history of normal deliveries
Group II, Out of hundred patient 35% had successful VBAC, with no previous vaginal deliveries, and 65% ended up in repeat caesarean section (ERCS), Either due to fetal distress or suspected scar dehiscence

DISCUSSION

Demographic profile of women elected for trial of scar showed that patient in both group were young, peak of their reproductive lives, with mean age was 30.3±2.9 and 31.1±2.6 in group l and ll respectively

The age of the mother is directly related to the success of VBAC This is consistent with study conducted by Srinivas in March 2007[1].

It was a retrospective cohort study of women, who were offered VBAC from 1996-2000, in 17 communities and universities hospitals[1].

In this study(21-35) years was taken as referent group, after controlling various confounding variables ,it was concluded that in case of increase maternal age of women, the age factor has a direct impact on a trial for labor which would be unsuccessful. So the chances for the attempt of VBAC become relatively less. While teenage women does not appear to be an increase risk of VBAC related complications[1].

In my study trial of scar was done between age group 25-35 years. This age group alone does not affect the outcome of VBAC.

Both groups were booked cases presented through emergency. In both groups,no patient was induced. Augmentation of labor was done in selected cases with continuous fetal heart rate monitoring with cardio tocograph. In my study,100 patient are selected in each group after fulfilling the inclusion and exclusion criteria. In GROUP I : the results were encouraging with a percentage of 76% successful VBAC, in all cases who had previous history of vaginal delivery.

GROUP II: 35% of patient had successful VBAC,with no previous vaginal delivery. It shows more chances of successful VBAC, in patient with previous history of vaginal birth.

In 2005 Landon et al conducted a similar study to understand the factors which have a direct influence on the success in all those patients where trial for a labor is given but with a previous history of vaginal delivery[2]. The results by Landon et al study showed a success rate of 73.6% percentage for VBAC. This success percentage had two category of patients, patients with a history of vaginal delivery had an greater number (86.6%) and less in all those patients with no history of vaginal delivery (60.9%).

In similarity to our research work a study was conducted in july 2004, by Yamani,the study was conducted in a grand group of multiparous women. The factors of the research work included the delivery standards and success of VBAC. The results for successful VBAC, was 80.7% for the grand group of multiparous women and 78.3% in multiparous women. The conclusion of the work showed a good association of vaginal deliveries with parity[3].

This is comparative to study published in Journal of Obstretics and Gynae published in July 2013,that woman with previous caesarean section who achieve cervical dialatation >7cm before caesarean section, had previous successful VBAC ,parity>2 have the greatest like hood of successful VBAC[4].

The impact of VBAC is greater (FOUR FOLD) in all those cases with history of vaginal delivery according to a research analysis[5]. The history of vaginal delivery has less incidence of uterine rupture[5].

According to the research study by Department of Obstretics and Gynaecology America, the patients with a history of previous vaginal delivery are ideal candidates of VBAC with success rating upto 90%[6].

The percentage of success rate of VBAC is 60-80% in patients with history of vaginal birth[7].

The difference in the results regarding number of patient with successful VBAC ,in both group is due to the fact that Nawaz Shareef hospital is tertiary care hospital ,with very high rate of referral from dispensery located in

different peripheral areas of Lahore and mostly are complicated cases, due to lack monitoring and operation theatre facility , blood transfusion in dispensaries.

In group II, trial of scar is successful in only 35% of cases. Rest of all patient delivered by emergency caesarean section due to fetal distress, or due to suspected scar dehiscence, but only one case emergency caesarean section done due to rupture uterus.

According to ACOG, if you had previous caesarean section, uterine rupture is at a greater threat is .2 to 1.5% with approximately 1 chance in 500[8].

The similarities of research conducted by Zelop et al show the complication of uterine rupture to 1.1% with all those cases not exposed to vaginal delivery and percentage of 0.2% exposed to vaginal delivery[9].

So, every pregnant patient with previous one caesarean section coming for obstetrical care should be properly evaluated ,and encouraged to have a trial of scar, especially in patient with previous vaginal birth.

CONCLUSION

All patient with previous caesarean section are potential candidate for VBAC, with higher success rate if patient is properly evaluated for trial of scar.

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