ORIGINAL ARTICLE

The Frequency of Vaginal Birth after one Cesarean Section with Vigilant Fetal and Maternal Monitoring

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ABSTRACT

Objective: To observe frequency of vaginal birth after one C-section with vigilant fetal/maternal monitoring.
Design: Descriptive study.
Place and duration of study: The present study was conducted in District Head Quarter Hospital Okara between April 2011 and Aug 2011.
Method: A total number of 92 patients of the age of 18-40 were studied. These patients with the term pregnancy i.e. between 37 to 42 completed weeks of gestation and history of one cesarean section were randomly selected who admitted to Obstetrics and Gynecology department. Baseline investigation was performed and obstetric ultrasonography was preformed to watch the thickness of previous scar and fetal well being. All patients then allowed proceeding for spontaneous labor.
Results: 92 Patients were enrolled in this study that filled the selection criteria. 64/92(70.7%) patients were delivered vaginally after previous one cesarean section and 28/92(29.3%) patients had emergency cesarean section. Among vaginal delivery 38/92(41.3%) patients had normal vaginal birth and outlet forceps were applied on 14/92(15.2%). Out of 28 patients who handed up on cesarean section, 13% had fetal distress, 9.8% patients showed failure to progress. Cesarean section due to scar tenderness was done in 6.5% and scar dehiscence was seen in 2%.
Key words: Cesarean section, Vaginal delivery

INTRODUCTION

The term cesarean section is a surgical procedure to deliver a baby through an incision in the uterus. Its rate varies internationally from 10 to 30%. National Institute of Health and Human Development Conference (NICHD) concluded that this 25 to 30 % increase in cesarean rates could be attributes to elective repeat cesarean sections and that Vaginal Birth after Cesarean (VBAC) would be an appropriate way to reverse the existing trend. Soon thereafter, attempts were made to encourage trials of labor in eligible women. As a result number of women with successful VBAC increased dramatically in USA from 3.4/100 women in 1980 to 28.3/100 in 19996. There are quite clear advantages of VBAC like easier recovery then repeat elective cesarean section, less risk for thrombo-embolism, shorter hospital stay, possible low rate of uterine and wound infection as well as fewer medical risks for both mother and baby. According to American College of Obstetrician and Gynecology (ACOG) a successful VBAC outcome depends on appropriate candidate selection, good counseling and obtained full informed consent from the patients and according to Society of Obstetrician and Gynecology Canada (SOGC) guidelines for safe and successful labor after cesarean section women should delivered in hospital with continuous electric fetal monitoring(EFM). This study was conducted in District Head Quarter Hospital Okara to observe the frequency of vaginal birth after one cesarean section with vigilant fetal and maternal monitoring.

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MATERIAL AND METHOD

The present study was conducted in District Head Quarter Hospital Okara. It was a descriptive study and sampling was done by non-probability convenience technique. A total number of 92 patients of the age of 18-40 were studied. These patients with the term pregnancy i.e. between 37 to 42 completed weeks of gestation and history of one cesarean section with singleton pregnancy, cephalic presentation and estimated fetal weight of 2.5 to 3.5 kg (clinically and proved by ultrasonography)were selected. Patients with two or more cesarean section, history of placenta previa, borderline pelvis and cephalo-pelvic disproportion, twin gestation and patients with uncontrolled diabetes mellitus or pregnancy induced hypertension were excluded in this study. Baseline investigation was performed and obstetric ultrasonography was preformed to watch the thickness of previous scar and fetal well being. All patients then allowed proceeding for spontaneous labor. All the data was entered and analyzed using SPSS version 10.0.

RESULTS

Ninety two **p**atients were enrolled in this study that filled the selection criteria. 64/92(70.7%) patients were delivered vaginally after previous one cesarean section. Among 64/92 patients, 45/64 were < 30 years of age, 17/64 were in between 30-35 years of age and 2/64 were >35 years of age. Among vaginal delivery 38/92(41.3%) patients had normal vaginal birth and outlet forceps were applied on 14/92(15.2%).28/92(29.3%) patients had emergency cesarean section. Among 28/92 patients, 8/28 were < 30 years of age, 16/28 were in between 30-35 years of age and 4/28 were >35 years of age. Out of 28 patients who handed up on cesarean section, 13% had fetal distress, 9.8% patients showed failure to progress. Cesarean section due to scar tenderness was done in 6.5% and scar dehiscence was seen in 2%. There was no uterine scar rupture and no maternal or fetal mortality in the study.

Maternal age and mode of delivery

Mode of delivery	**Age (Years)**		
	<30	**30-35**	**>35**
SVD	27	09	01
Forceps Delivery	10	03	01
Ventouse Delivery	08	05	00
Emergency LSCS	08	16	04
Total	53	33	06
Gestational age and mode of delivery			
Mode of delivery	**Gestational Age (Weeks)**		
	37-38	**39-40**	**>40**
SVD	13	23	02
Forceps Delivery	05	09	00
Ventouse Delivery	06	06	00
Emergency LSCS	09	15	04
Total	33	53	06

DISCUSSION

Vaginal birth after cesarean delivery is difficult and sometimes a controversial decision for pregnant women who have had previous cesarean section. This a decision affected by complex set of factors included women own experience, the reason for primary cesarean section and subsequent recovery. Although the most frequent indications for cesarean section are previously cesareans birth, dystocia, malpresentation and non reassurance fetal status. No doubt each delivery method has its own advantages and disadvantages. It is basically the responsibility of obstetrician to decide which method of delivery is suitable for an individual. This study assessed prospectively the frequency of VBAC in 92 patients. The frequency of VBAC is found in 70.7%. This is comparable to that reported in European literature which is 60-82%. It is also correlates with three local hospital based studies conducted at Lahore, Karachi and Peshawar frequencies of 72%, 62% and 78% respectively. The age distribution of the women studies shown that the frequency is greatest between 20-30 years of age group and lowest is observed in more than 35 years of age. Similarly Strinivas SK evaluated the effects of maternal age on VBAC success and VBAC related maternal complications. Patients with increasing maternal age have an increased risk for experiencing a failed VBAC trial. On the other hand among the factors which are associated with successful VBAC, previous vaginal birth, particularly previous VBAC is the greatest predictor for successful VBAC. It is associated with the 87-90% planned VBAC success rate. There was no fetal or maternal mortality in this study and no rupture of uterine scar reported. Maternal mortality and serious morbidity are fortunately very rare and for this reason estimates of their frequencies are imprecise. The risk of uterine rupture is increased in patients who have an excessive amount of oxytocin, who has experienced dysfunctional labor and who had history of two or more than two cesarean section.

CONCLUSION

Proper counseling for trial of labor and evaluation of the case of women with prior cesarean section is considered a key method of reducing cesarean section rate. There is no doubt that a trial of labor is relatively safe procedure but it is not risk free

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