ORIGINAL ARTICLE

Maternal and Perinatal Outcome in Women having VBAC

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ABSTRACT

Background: Caesarean section rate as a mode of delivery has been increasing in the recent years despite the three fold increased risk of mortality compared to vaginal deliveries. This study is conducted to determine the mode of deliveries and their maternal and fetal outcome.

Objective: To determine the maternal and perinatal outcome in women having a VBAC (Vaginal Birth after Cesarean Section) and to assess the safety of VBAC.

Methods: A total of 206 pregnant females fulfilling the inclusion criteria were selected via consecutive sampling. Patients with previous 1 LSCS were observed for outcome. This study was conducted at Department of Obstetrics and Gynecology, Ziauddin Hospital, Kemari Campus, Karachi employing case series over a period of one year.

Results: Of the 206 patients 72.8% delivered vaginally. Of these 60% of the patients with VBAC had no maternal or perinatal complication while 27.8% has failed trial of labor and had emergency caesarean section due to different reasons .Approximately 13.6% of patients had impending uterine rupture while undergoing VBAC trial needing emergency LSCS with 1% complicated by scar rupture, 4% developed scar tenderness leading to emergency LSCS, 1% resulted in vaginal hematoma and 1% with cervical tear.The perinatal outcome in VBAC was a NICU admission of 6.9%; Meconium stain liquor: 6.8%; Fetal distress 1.9% and no perinatal death.

Conclusion: is safe & good modality to reduce caesarean section rate and should be offered and conducted under close monitoring and is successful with few maternal and perinatal complications.

KEY WORDS: *Caesarean Section, Fetal Outcome, VBAC.*

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INTRODUCTION

Caesarean section is a common surgical procedure world wide.[1] Variations exist in rates of prevalence for caesarean delivery across countries; currently the rate ranges from 10% to 40%.[1,2] This high cesarean section rate has put a burden on the economy of nations and individuals. Previous cesarean section is the most common primary indication for 28% of the births in UK and over 40% of births in U.S[3] while WHO recommends a caesarean section rate between 7-21%.

The American college of obstetrics gynecology issued consensus statement supporting vaginal birth after caesarean section(VBAC)as a safe and acceptable option in an attempt to address the increasing caesarean rate and increase in the proportion of women attempting vaginal birth after caesarean section.

In 1988 ACOG recommended that, in the absence of a contraindication, a woman with one previous one cesarean delivery be counseled to attempt labor in a subsequent pregnancy.[1,4] A 60 to 80% success rate of vaginal birth after previous caesarean section has been reported by many authors.[5]

There has been dramatic increase in caesarean deliveries over the past thirty years. The old held belief of 'once a caesarian is always a caesarian' is no longer true. Now there is a worldwide change in increased practice of attempting vaginal deliveries while the rates of postpartum fever, wound infections, maternal discomfort, length of hospital stay, need of blood transfusions and hysterectomy have decreased remarkably.[6] There are several factors that make way for a successful vaginal birth after one caesarean section including favorable bishop's score, BMI (<20), prior vaginal delivery, weight of baby (<3.5 kg). Maternal age is also very important with an age less than 40 years considered a favorable factor. On the other hand the trial of labor is associated with a greater risk of uterine rupture and perinatal death.[7]

METHODOLOGY

After approval from ethical committee female patients who met the inclusion criteria were included in the study. Informed consent was taken providing protocol of the study explained. A detailed history and thorough examination was performed on admission. All basic laboratory investigations were also carried out. Some of the parameters; patient's age, previous vaginal birth and reason for first cesarean section and Bishop's Score of admission were reviewed. After evaluation, patients were counseled regarding potential benefits and harms of undergoing a trial of labor. Intravenous line was maintained, blood grouping and cross-match was done, and patients were allowed to go into spontaneous labor and then patients were closely monitored with vital signs, intermittent fetal heart auscultation, and scar tenderness and per vaginal bleeding. Facilities were made available throughout the trial of labour for an emergency cesarean section. After delivery, patients were kept under observation for 24 hours after which they were shifted to ward. Emergency cesarean section was performed at any stage where maternal or fetal risks were identified. The outcome of the trial was documented on a Performa of each patient attached to their files.

Data was analyzed on SPSS version 17.0. Factors analyzed in view of successful vaginal delivery after previous one cesarean included patient's age, parity, gestational age on admission, mode of delivery, outcome of the trial of labor, complications, weight of the neonate and APGAR score, indication of previous cesarean section, reason for first cesarean and prior vaginal births. The mean ± standard deviation and percentage of all the numerical data were calculated. The outcome of routine investigation and progress parameters was tabulated. The number of cases was classified as those proceeding to normal vaginal delivery and those not delivered vaginally.

RESULTS

The results of the study showed that 72.8% delivered vaginally after 1 LSCS, while 27.18% failed the trail and ended up in emergency LCSC. Approximately 66% of patients did not developed any complication, while 13.6 % patients had impending rupture, 1% scar rupture and ended up in obstetrical hysterectomy,4% diagnosed with scar tenderness, 3.9 % went in non progress of labor, 1% developed vaginal hematoma, NICU admission were 6.9%, in 6.8% me conium stained liquor noticed,1%

complicated with cervical tear, fetal distress with 1.9%.

Figure 1: Percentage of mode of delivery for trial of VBAC

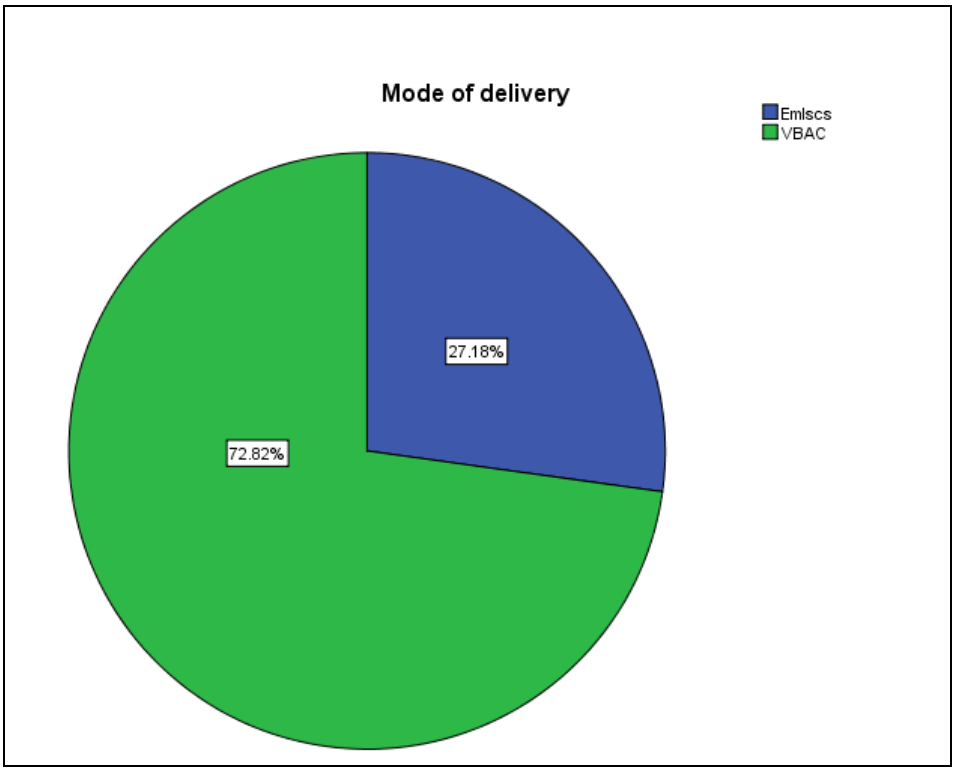
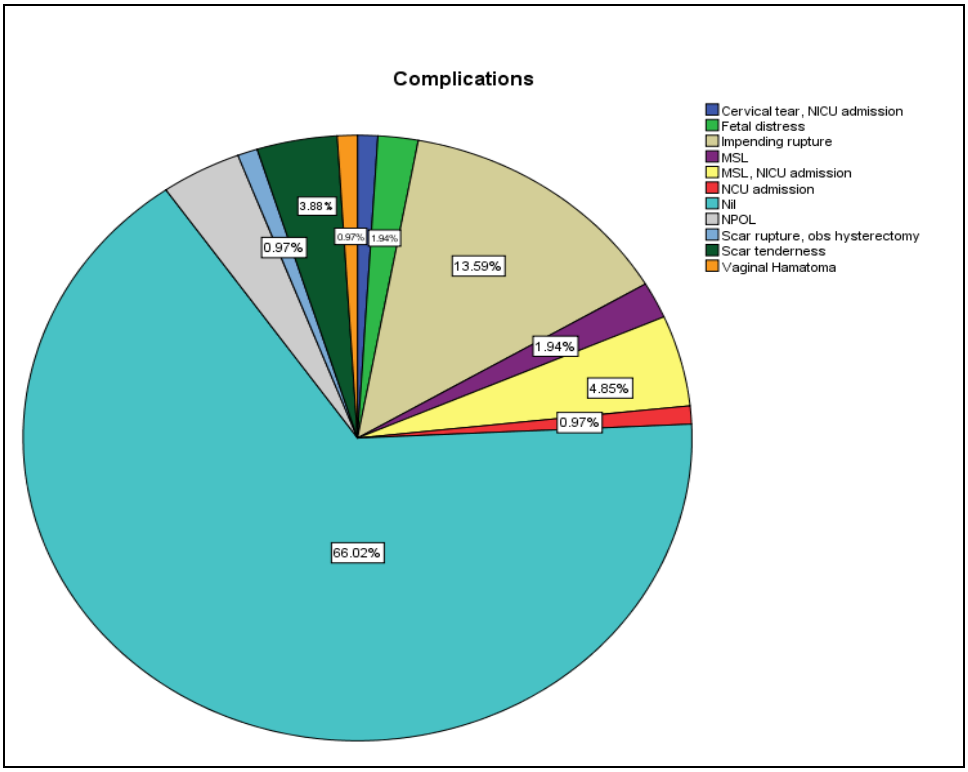


Figure 2: Percentage of complications encountered during trial of VBAC



DISCUSSION

Given the status of Pakistan as a developing country, it is better to give trial of labor in those patients who do not have absolute contraindication for vaginal delivery. Instead of the previously upheld policy 'once a caesarean is always caesarean section' a new policy of 'once a caesarean always a hospital delivery' should be adopted.[8] Proper counseling including risks and benefits for trial of labor and evaluation of the cases of woman with previous Caesarean section has been considered a key method of reducing Caesarean section rate. The incidence of uterine rupture argues for the trial of labor in carefully selected patients with previous Caesarean section. The rate of normal vaginal delivery after one Caesarean section in the current study was 8%. Most of studies indicate that 60%to 80% woman can achieve a normal vaginal delivery following a previous one LSCS.[9,10,11]

In Pakistan large scale data on safety and outcome of trial of labor with previous scar is insufficiently available. In patients with favorable parameters, the success rate of trial of labor was found to be as high as 70-80% in two retrospective studies conducted in Pakistan.[12,13]

Caesarean section rate has been increasing nowadays even though the caesarean section carries three fold increased risk of mortality compared to vaginal deliveries. Increased risk of maternal complications with repeat caesarean section and safety of VBAC, trial of labor for selected group of patients with previous scar has become a preferred strategy.[14] Several reports have indicated that the absolute risk of uterine rupture attributable to a trial of labor is about 1 per 1000.[1,4] Some author reported Successful vaginal delivery in 70% of the patients and repeat emergency caesarean section in 30% of the patients.[15] The leading indications for the repeat caesarean sections were: failure to progress, fetal distress and scar tenderness. There were no maternal and fetal complications occurred. They concluded that VBAC is a safe practice[16] The purpose of the current study was to determine the mode of deliveries, maternal and fetal outcome. Caesarean section is a surgical procedure to deliver baby from uterus. The rate of caesarean section varies internationally from 10% to 25% .Policy was the result from the fear of catastrophic uterine scar rupture of classical caesarean section, which persisted even after its replacement with LSCS without the same basis[1].As we know that VBAC is becoming more and more common the stimulus for interest in vaginal birth after CS was probably the progressive rise in CS rate[17,18].Trial of labor after LSCS reflects patients choice as much as obstetricians decision. The way in which the woman is counseled will influence this choice if a doctor has no objection to repeat LSCS or vaginal birth and inform woman that her chance of repeat operation is around 30 %.[15] .Labor after one LSCS should be encouraged in most woman who are willing to attempt it, provided no obstetric contraindication exist.[19,20]

Hence, the purpose of this study was to predict the maternal and perinatal complications while having trial of vaginal delivery after 1 caesarean section. Identification of factors who are likely to have a successful VBAC, thus reducing fetomaternal mortality. Promoting vaginal birth in patients with a previous cesarean section and reducing its complications is another benefit of the study. Selection of patients and monitoring of labor course is very important for increasing successful vaginal delivery and reducing repeat Caesarean section.[21] It was surmised that from the undertaken study and a review of previous similar studies conducted that impending rupture of scar is most frequent complication faced during VBAC.

CONCLUSION

The study was conducted to observe the safety and complication of VBAC and it was concluded from the study that vaginal birth after caesarean section (VBAC) is safe and good modality to reduce caesarean section rate with few maternal and perinatal complication. VBAC should therefore be offered as an alternative under conducted under close monitoring.

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