ORIGINAL ARTICLE

Vaginal Delivery after First Caesarean Section

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Abstract

Vaginal delivery after previous Caesarean deliver is a challenging job for the attending obstetrician. It requires patience, continuous monitoring, and precise decision that when not to wait for a normal delivery. The study was conducted in District Hospitals on all the patients who had under gone previous caesarean delivery. All the patients who had under gone Caesarean Section at least two years before present EDD were included in the study. A total of 60 patients were included in the study, majority had undergone operations two years back, obstructed and prolonged labour were the indications in majority. Only 47 normal deliveries could be conducted, all others were delivered by Caesarean Section. There was no morbidity and no mortality. Normal vaginal delivery after previous caesarean section is possible, provided the patients are thoroughly worked up, scientifically evaluated, and honestly managed. There may be problems in remote where all the facilities for foetal monitoring and post-delivery management are not available.

Key Word

Vaginal Delivery, Caesarean Section

Introduction

Normal vaginal delivery after first caesarean is a challenging job, especially if the pregnant woman has post-dated, delayed or obstructed labour. The potential of vaginal birth after caesarean section (VBAC) was outlined by national institute of health in a report in the year 1981.(1-2) It is a fact that prior vaginal births improve the success rate of VBAC. Also factors like premature rupture of membranes, hypertensive disorders of pregnancy, and post date pregnancy do not affect the outcome adversely. A woman who has already had an easy vaginal delivery and then had a caesarean section (CS), when her next baby was breech is much more likely to have a successful VBAC than one who had CS after being fully dilated and pushing for three hours with her first baby who was small and properly positioned. Certainly, it is impossible to predict who will be able to have a vaginal delivery (VD) and who will end up with a repeat CS. Attempting a VBAC is called a trial of labor after caesarean (TOLAC). Overall, about 60 to 80% of women who attempt a VBAC deliver vaginally.

Material and Methods

The prospective study was conducted in the department of Obstetrics and Gynaecology in Government Hospital Sarwal, Jammu over a period of 4 years on the pregnant woman with previous caesarean section (CS). All women with single CS, non-recurring indications of previous CS, Singleton pregnancy, gestational age of more than 32 weeks were included in the study. Also, women younger than 35 years, those with previous VBAC, previous CS due to foetal indication, only one previous CS, and no major uterine surgery were included in the study. All the women were regularly followed in outpatient department and admitted after the labour pains or electively. Trial of labour (TOL) was conducted under careful supervision. Continuous foetal and maternal monitoring was done in high risk patients. Induction augmentation was done as per indication with suitable drugs. The effects of previous vaginal birth, pregnancy induced hypertension (PIH), indications of previous CS, Premature rupture of membrane (PROM), were evaluated. All the patients were investigated in a way that as and when a CS is

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required anaesthetic management should be smooth. Depending on the progress of the labour, median, mediolateral, medial, modified medial, or lateral episiotomy was performed. Results of normal vaginal delivery were recorded, indications for repeat CS were also enumerated. Morbidity and mortality were recorded, and all the patients were followed in outpatient department at follow up.

Results

Of the total 60 patients, twenty-nine patients, 48.33% underwent spontaneous vaginal delivery, twenty-one 35% underwent repeat CS, and ten 16.66% of the patients delivered by low forceps. Commonest indication for CS were malpresentation, foetal distress, CPD, failure to progress. Women with previous vaginal birth had more than 80% vaginal delivery rate, compared to around 60% in no vaginal delivery group. Most of the women were in 3rd decade of life, majority para three, 16 (26.66%) had previous vaginal delivery before CS. The difference in vaginal delivery rate was significant, vaginal birth rate of 65% was noted in PROM patients, which is comparable with overall VBAC rate. Induction augmentation was done in 16 and 68.75% delivered vaginally. Even in patients who had floating head at onset of labour, 48% majority 56% delivered normally and 44% required CS. Detailed and careful monitoring was needed in all the women, one patient had uterine rupture during trial and needed intervention. Episiotomy was performed in 57% of the patients, and majority had median and mediolateral episiotomy. There was no morbidity, mortality or neurological event.

Discussion

The chances of VBAC are quite high if the reasons for your previous C-section isn't likely to be an issue this time around. Prior vaginal delivery is an excellent prognostic indicator of successful VBAC, (3) pregnancy complications like hypertension, post-dates, PROM and foetal macrosomia do not contraindicate the TOL. (4) Though the risk of failure is high in patients with obesity, pre-eclampsia, older age, previous CS in last 19 months, large foetus about 8.8 pounds, and Vertical CS scar, post-dated beyond 40 weeks. In spite of all the indication, precautions and specialised care chances of uterine rupture at VBAC are around 1%, and some of the patients are not willing to even consent for such TOL. VBAC is possible in about 70% of the patients, and the benefits of this trial are patient doesn't require surgery, less blood loss, faster recovery, less infections, no chance of bladder / bowel injury and fewer problems with future child birth. VBAC should be considered if previous caesarean incision was low transverse incision, pelvis is adequate, never had any other extensive uterine surgery, never had a uterine rupture before, you don't have risky medical or obstetric problem, qualified doctor to monitor round the clock, qualified obstetrician, anaesthetist, personnel and fully equipped operation theatre are available. In 2005 the centre for disease control and prevention reported the national caesarean birth rate was the highest ever at 29.1% more than a quarter of all deliveries. If you desire to try a vaginal delivery after having a caesarean, you should be encouraged by knowing that 90% of women who have undergone caesarean deliveries are candidates for VBAC. Statistically, the highest rate of VBAC involves women who have experienced both vaginal and caesarean births and given the choice have delivered vaginally. Roughly 3 to 4 out of 5 – women who have previously undergone caesarean birth can successfully give birth vaginally. The greatest concern for women is the risk of uterine rupture during a vaginal birth. According to American College of Obstetricians and Gynaecologists (ACOG), if you had a previous caesarean with low transverse incision, the risk of uterine rupture in a vaginal delivery is .2 to 1.5%, which is approximately 1 chance in 500. (5) Recent data from ACOG stated that VBAC is safer than a repeat caesarean, and VBAC with more than one previous caesarean does not pose any increased risk.(6) The observations of the present study with regard to less morbidity and mortality in VBAC is in accordance to the findings reported in meta-analysis in TOL.(7-8) Less number of patients in the present study is because of the fact that all the patients who can afford to spend prefer to go to teaching institutions and do not stay in peripheral or district hospitals. Higher rate of forceps delivery was certainly to cut short the duration of 2nd stage of labor. Only one patient had uterine scar rupture and needed caesarean hysterectomy is in accordance to other reported cases. (9-10) The role of episiotomy in vaginal delivery is well established, and had been recommended to be performed mediolaterally in all nulliparous women. (11) to protect fetal head from trauma and pelvic floor from extreme lacerations. Our results are in contrast to the findings where stress incontinence has been reported in patients after episiotomy, (12) possibly the number

was less, and the follow up was not strict or possibly the patients have gone to urologists after any such problem. We do not follow the practice that episiotomy should be abandoned, because pregnancy by itself and child birth are the possible risk factors for the onset of urinary incontinence, anal incontinence and pelvic organ prolapse, compromising the quality of life for a large number of women of all ages. (13)

In conclusion, VBAC is a excellent alternative to repeat CS, provided all the criteria for TOLAC are fulfilled, progress of labor is monitored by an expert in the field in a hospital where all the emergency services are available for any surgical intervention, and prevention of maternal / foetal morbidity and mortality. No time should be wasted in trial if there is any doubt of further risk to foetus or the pregnant women.

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