Original Article

Study of Vaginal Birth after Caesarean Section

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Abstract

Introduction: Caesarean delivery means a surgical operation by taking an incision over the uterus to deliver a baby through abdominal route. **Material and Methods:** 190 patients were selected from. Department of Obstetrics and Gynecology, at Bharati Vidyapeeth Medical college and Hospital, Sangli from 1st August, 2014 to 31st August,2015. **Results:** 190 patients with a previous lower segment C. Section were admitted out of which 90 patients were selected for trial of labour. 80(42.10%) patients had a successful vaginal delivery while 10 (5.26%) ended up with a secondary C. **Conclusion:** Study proves that vaginal birth is possible in selected previous LSCS with less risk and morbidity by proper monitoring the patient.

Key words: VBAC, scar tenderness, maternal mortality, LSCS.

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INTRODUCTION

Caesarean delivery means a surgical operation by taking an incision over the uterus to deliver a baby through abdominal route. Its rate varies internatio-nally from 10-25%. During the half of 20th century, a caesarean section implied that all subsequent pregnancies were very likely to be delivered the same way. This 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] When uterine rupture occurred with a previous LSCS, it was not as disastrous event as with USCS, These observations heralded the era of the trial of scar or vaginal birth after caesarean delivery (VBAC). VBAC is becoming more and more common. The stimulus for interest in vaginal birth after CS was probably the progressive rise in CS rate.[2-4] Many women can safely and successfully have a vaginal birth after caesarean delivery. Current medical evidence indicate that 60-80% of women can achieve a vaginal delivery following a previous lower uterine segment caesarean delivery.[5] Looking at the rates separately for elective and emer-gency sections, these rates have increased almost in parallel with each other, the ratio of emergency to elective sections staying roughly at about 60%:40%. The rate of elective cae-sarean section raise from 5.8% to 10.6% in 1999, a total rise of 83%.[6] Studies have shown that by encouraging the women with previous one caesarean section for a non-recurrent cause can decrease this rise in caesarean section rate. Caesarean delivery rates in the United States showed a dramatic rise during the period from 1965 to 1980. By the early 1990s the national caesarean rate was 25% and had fallen to 21% in 1996; it is now rising again.[7] The trial of vaginal birth after caesarean section (VBAC) rate rose from 35% to as high as 64% in 1995. Thus one can see that almost doubling rate of trial of VBAC did not decrease the success rate, indicating that many repeated caesarean deliveries were avoidable. The rate of repeated caesarean deliveries fell from an initial 7.4% to 3.85 at the end of the study.[8] Decrease in women with a previous caesarean sec-tion undergoing a trial of labour reflects patients choice as much as obstetricians decision. The way in which a woman is counseled will influence this choice. If a doctor, has no objections to a repeat caesarean section and informs the woman that her chances of a repeat operation is around 30%[9], the woman herself will

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be influenced by this. Evidence suggests that there is significantly greater morbidity associated with a trial of labour compared with an elective caesarean section which will further affect the decision.[10] Recent studies have shown that maternal request for caesarean section has received much publicity and interest in medical literature. The General Medical Council have drawn up 14 points of good medical practice (GMC 1995). Of these several are pertinent to a consultation with patients about maternal request for elective caesarean section; listen to the patient's views and respect their right to be fully involved in the decisions about their care. With the population of the Patients' Charter and changing childbirth, women were given a more central role in their obstetric care, After these publications maternal request for caesarean section appears to have become an important issue, leading at least in part to the increasing caesarean section rate.[11] Maternal request for elective caesarean section must be one of the few instance when the patient can request major surgery with all the inherent risks with no proven benefit to her or her baby. Why would so many do this? Anecdotal evidence suggests concern over safety to themselves and the fetus. Other concerns are that they may labour for many hours, only to end up having another caesarean section.[11] It is surprising that women will choose to subject them-selves to a major surgical procedure with all the inherent risks with no proven benefit to their baby or themselves. It has been postulated that this is in fact obstetrician-driven, that women have detected during consultations that obstet-ricians feel the elective caesarean section is best and have thus requested this.[12] Thus proper counseling (for trial of labour) and evalua-tion, of the cases of women with prior caesarean section has been considered a key method of reducing the caesarean section rate. Publications reinforce that although there is no doubt that a trial of labour is a relatively safe procedure, it is not risk free and should not be undertaken in casual fashion.

A trial of labour after one LSCS should be encouraged in most women who are willing to attempt it, provided no obstetric contraindication exists[13,14] but under supervision to reduce caesarean delivery rate.[15] Many studies proved that scar dehiscence occurs far less frequently what is thought in LSCS. Labour after previous caesarean section has a 75% success rate with the risk of uterine rupture of less that 1%1[6,17,18,19,20] Trial of labour increases slightly the risk of uterine rupture by 0.24%.[21] In developing countries like Pakistan it is better to give trial of labour in patients who do not have absolute contra-indications for vaginal delivery. The policy of once a caesa-rean always a caesarean section must be abandoned and re-placed by once a caesarean always a hospital delivery.[22] Health care personnel should be trained regarding manage-ment of the cases with previous section. Departmental poli-cy regarding the criteria for selection of case, for trial of labour should be analyzed in depth and reviewed in order to increase the percentage of cases, which could be enrolled for trial of labour. There is now increasing emphasis on the need for patients to be involved in medical care, with higher level of motivation and satisfaction.

MATERIAL AND METHODS

190 patients were selected from. Department of Obstetrics and Gynecology, at Bharati Vidyapeeth Medical college and Hospital, Sangli from 1st August, 2014 to 31st August,2015. Patient included in study are normal pregnancy, clinically adequate pelvic , vertex presentation and spontaneous onset of labour. Exclusion criteria are patients with cephalo pelvi disproportion ,previous classical caesarean section, unknown caesarean section, macrosomia and women with additional obstetrical and medical complication like diabetes, hypertension, multiple pregnancy, mai-presentation, intrauterine growth restriction, and placenta previa . After admission, investigations were carried out, informed consent was taken and trial of labour was given to the patient under vigilant monitoring with the facility of operation theatre, anaesthesia and paediatrician. Maternal and fetal monitoring was carried out.

RESULTS

Out of 190 patients with previous LSCS 90 were carefully selected for trial of scar. Trials of labour were mostly of spontaneous onset. Of these 80 (42.10 %) had successful vaginal deliveries while 10 (5.26 %) had a repeat LSCS. Of the 80 successful vaginal births ,8 were assisted either by vacum[23] or outlet forceps[24].

Table 1: Management of subjects (n=190)

Procedure	Total Patients	Percentage
1) Elective C Section	100	52.63%
2) Trial of Labour	90	
3) Vaginal Delivery	80	42.10%
a)Spontaneous	72	90%
b)Instrumental	8	10%
4) Secondary C Section	10	5.26%

10 patients in the study groups ended up with secondary C.Section indications being fetal distress (5) 50% delay in descent (3) (30%) and scar tenderness (2) 20 %. Uterine rupture was found in 1 case. The patient had delay in decent of the fetal head and scar tenderness for which secondary LSCS was done, during the procedure bloodless scar dehiscence was found without further maternal or fetal morbidity.

Table 2: Indications for Secondary LSCS (n=10)

Indication for Secondary LSCS	Total Patients	Percentage
Foetal Distress	5	50%
Delay in Descent	3	30%
Scar Tenderness	2	20%

DISCUSSION

The study demonstrates that trial of scar is possible in carefully selected patients with a nonrecurring indication for previous LSCS. There are some absolute contraindications to allowing an attempt at vaginal delivery, such as classical scar, previous vesicovaginal fistula, previous ruptured uterus, severe Cephalopelvic Disproportion and malpresentation in current pregnancy. If the indication for previous LSCS has been nonrecurring e.g malpresentation, antepartum hemorrhage, fetal distress, severe pre-eclampsia, or mild to moderate dystocia. If a reliable history confirms a lower segments scar and an uncomplicated postoperative recovery then vaginal delivery should be attempted4. Our study showed a success rate of 88.89% in 90 patients attempting a trial of labour. Several Studies[23,26] also demonstrate similar results. The factors to be weighed in the balance are the risk to the mother of repeating the cesarean section and the risk to her and her child of rupture of the scar if labour is allowed. In our study out of 90 patients selected for trial of scar we had only one case of scar dehiscence. Peel and chamberlain[25] made the important observation that the incidence of scar rupture increases in patients allowed to attempt vaginal delivery after a Cesarean section for disproportion. Other unfavorable factors tending to increase the risk of scar rupture are sepsis following operations and implantation of placenta beneath the scar in subsequent pregnancy which can be ruled out by Ultrasound. A thorough counseling of the patients is essential and woman should understand, however that in the event of obstructed labour or fetal compromise it will be necessary to perform caesarian section. Careful supervision of labour is essential, although induction of labour should be avoided if possible. Oxytocin may be administered with caution. Progress of labour should be assessed by repeated abdominal palpation, vaginal examinations and progress recorded on partographs. FHS should be auscultated regularly. It is mandatory that labour should be conducted in hospitals with facilities for emergency LSCS. Digital examinations of the integrity of the scar after delivery has been advocated but there is risk of introducing infections and creating a defect. So following delivery, digital exploration of scar is best avoided. In the absence of abnormal bleeding evidence of its benefits are inconclusive[24].

CONCLUSION

Good antenatal surevelliance is required on management of precious C-section. Throughout labour careful observation required. There is no doubt that a trial of labour is a relatively safe procedure but it is not risk free and should not be under taken in casual manner. Hence trial labour after 1 caesarean section in which uterine incision involved only the lower segment is safe in our setup where high tech facilities of continuous electronic fetal monitoring and intrauterine pressure monitoring are limited. Higher morbidity and health care cost of repeat lower segment caesarean section outweigh, the advantages of such procedure and trial of labour after caesarean section helped to decrease the CSR in our department.

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