

Successful Trial of Labor After Primary and Repeated Cesarean Sections: A Case Report

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Abstract

This is a case report of a patient who achieved a successful vaginal birth for five times attended by a traditional birth attendant twice after two cesarean sections and thrice after three cesarean sections.

Keywords Vaginal birth after cesarean delivery, VBAC, VBAC delivery, trial of labor after cesarean delivery, prior cesarean delivery, risks for uterine rupture, vaginal delivery

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Introduction

Policies of routine repeat cesarean section for all women with scarred uterus were never widely practiced now in the world ⁽¹⁾. A trial of labor after previous cesarean delivery has been accepted as a way to lower the overall cesarean delivery rate ⁽²⁾. Planned vaginal birth after cesarean section is a clinically safe choice for the majority women with a single previous lower segment cesarean delivery ⁽³⁾. The proportion of women with previous cesarean section who are allowed a trial of labor varies from country to country and from center to center ⁽⁴⁾. The decision to undergo a trial of labor is an individual one and should be based on careful patient counseling ⁽⁵⁾. Most published series indicate that approximately 72-75% of trials of labor after a previous cesarean delivery result in successful vaginal births ⁽⁶⁾.

The most important complications of attempted vaginal birth for women with single previous low transverse cesarean section are uterine scars dehiscence and rupture. The risk

of uterine rupture increases with the number of previous uterine incisions ⁽⁷⁾. Because of the risks associated with trial of labor after cesarean and complications, the American College of Obstetricians and Gynecologists recommends that the trial of labor be undertaken in facilities with staff immediately available to provide emergency care ⁽⁸⁾.

The aim of presenting this case is to show the probability of safety of conducting a trial of labor repeatedly in the same patient after one, two and three lower segment cesarean sections.

The case

Mrs. Sabha was 35 years old, she was 38 week pregnant, gravida 10 para 9 all are alive, term and of normal weights. She presented requesting cesarean delivery and bilateral tubal ligation. According to her past obstetric history; her 1st pregnancy has been ended by uncomplicated emergency cesarean section for a breech presentation at term. She delivered the 2nd baby by normal vaginal delivery. The 3rd

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pregnancy delivered by emergency cesarean section for prelabor rupture of membranes. The 4th and 5th pregnancies delivered vaginally successfully by a traditional birth attendant. In the 6th pregnancy the patient chose to deliver her baby in the hospital, so she was delivered by cesarean section because she had 2 previous cesarean sections. Then the patient delivered her 7th, 8th, and 9th pregnancies by normal vaginal delivery also by a traditional birth attendant although she had three previous cesarean sections. The patient had no records of the previous operations. The interpregnancy intervals in all these pregnancies were between 1 and 2 years without any contraception and the neonatal weights were within average. The outcomes were successful following all deliveries and there were no maternal or neonatal complications. All these operations were not complicated by infection or postpartum hemorrhage and no history of blood transfusion. The patient had no medical diseases. On examination, the vital signs were normal and she was of normal body mass index and obstetric examination was of term uterus, longitudinal lie, of vertex presentation with audible fetal heart. For her last pregnancy (the 10th), the patient had requested cesarean and bilateral tubal ligation.

The operation was done in Albatool Maternity Teaching Hospital in Mosul at 2009. The indication was three previous cesarean sections. During the operation, the lower uterine segment seemed not affected by her repeated pregnancies and birth and there were no adhesions to the abdominal wall and or intraabdominally. The postoperative period passed smoothly.

Discussion

The concept of vaginal birth after cesarean section is interesting; although it is not safe as originally thought ⁽⁹⁾. There are no randomized controlled trials comparing planned vaginal birth after cesarean with planned repeated cesarean section and the evidence for these

interventions is obtained mainly from non-randomized cohort studies ⁽¹⁰⁾.

We tried in this case report to show that vaginal delivery after cesarean section can be achieved successfully after one, two, and three cesarean sections. The surgeon should provide the patient information about the state of the lower segment during each operation, so the doctor and the patient can take an idea about the risk of the trial of labor in the next pregnancy. Although obtaining an old record is useful, its absence probably should not interdict a trial of labor in a patient who desires to attempt vaginal delivery ⁽¹¹⁾. This patient has deficiency in her previous records but the decision to deliver vaginally was taken by the patient and the midwife based on ignorance and lack of adequate information about the risk and benefit of planned vaginal birth after cesarean section. Nevertheless, her decision has positively affected her plans for future pregnancies.

Some authors said that trial of labor following two previous cesarean sections is acceptable in the majority of cases and result in good maternal and neonatal outcomes ⁽¹²⁾. In this case, the repeated success is due to the success in the first attempt. Previous vaginal birth especially after one cesarean section is the best predictor for successful vaginal birth after more than one cesarean section ⁽¹³⁾.

An important factor that helped in the successful outcome in this lady was that the indication of first cesarean section was not a recurrent cause (breech presentation, unless the breech recurred), also the patient was young and of normal body mass index. Body mass index greater than 30 is a predictor of unsuccessful outcome ⁽¹⁴⁾. Advanced maternal age is associated with decreased likelihood of planned vaginal birth after cesarean success ⁽¹⁵⁾. The gestational age of the previous pregnancies in this lady were all at term and also the babies' weights were normal. Both preterm and postterm pregnancies and birth weight greater than 4000 g can affect the success rate of vaginal birth after cesarean

section. Preterm cesarean section is a predisposing factor for rupture uterus in the subsequent pregnancy ⁽¹⁶⁾.

We see that in this patient the short interpregnancy interval did not affect the outcome. Some studies reported that the success of the trial is related to period in between pregnancies. An interdelivery interval of ≤ 24 months of gestation was associated with a 2- to 3-fold increase in the risk of uterine rupture compared with an interval of >24 months of gestation ⁽¹⁷⁾.

There is limited evidence on whether maternal or neonatal outcomes are significantly influenced by the number and type of prior uterine scar ⁽¹⁸⁾.

This case report presents an evidence to facilitate the antenatal counseling in women with prior cesarean birth who want to undergo planned vaginal birth after cesarean section.

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