

# Spontaneous Vaginal Delivery After Three Consecutive Cesarean Sections: A Case Report

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## Abstract

Women with multiple scarred uteri are at high risk of uterine rupture. Therefore, elective cesarean section should be done in these women. We report a case of spontaneous vaginal delivery with an intact uterine scar in a woman with a past history of 3 cesarean sections.

## INTRODUCTION

Women with scarred uterus are considered at risk of uterine rupture during pregnancy and labor.<sup>1,2</sup> Therefore, most obstetricians opt for elective cesarean section if there exist another anomaly in a patient with scarred uterus or when there is a past history of 2 cesarean sections.<sup>3,4</sup> This is also the policy in our institution. Due to fear of uterine rupture, trial of vaginal delivery is prohibited in women with a past history of 2 cesarean sections in our unit, unless that woman is received at full dilatation with the presenting part almost at the perineum. We report here a case of successful vaginal delivery with intact uterine scar in a woman with 3 previous cesarean sections. The woman was received with the head almost at the vulva. This case report -which reminds us that vaginal delivery is still possible after 2 or 3 cesarean sections- calls for the establishment of criteria for trial of at least double scarred uterus in well selected cases.

## CASE REPORT

A woman aged 31 years old, married, G5P3013, was received on the 15th December 2011 in labor at 39 weeks gestation. Her current pregnancy was well followed by an obstetrician who opted for an elective cesarean section (CS) at 38 completed weeks for a past history of 3 previous CS. However, because of lack of financial means, she decided not to honour the follow-up consultation. Her past history revealed that she had one emergency CS in 1998 (she was 18 years old) for cephalopelvic disproportion (CPD). The birth weight was 3200 g. Then, she had 2 other elective CS in 2007 and 2009 for type IV placenta praevia and a past history of 2 cesarean sections respectively. Birth weights were 3420 and 3780 g respectively.

On admission, the blood pressure, pulse rate, fetal heart rate and contractions were normal. Vaginal examination revealed a fully dilated cervix and the station of the head was at +3. She gave birth 5 minutes later to a female neonate whose birth weight was 3547 g with an Apgar score of 9 and 10 at the 1st and 5th minutes respectively. Gentle uterine scar exploration revealed no dehiscence. The woman was discharged 2 days later with her baby.

## DISCUSSION

Rupture of the uterus is a life-threatening obstetrical emergency associated with increased fetal and maternal morbidity and mortality. That is why an elective cesarean section is performed in women with double scarred uterus by most authors.<sup>3,4</sup> This is also our policy. Our patient would have benefited from an elective cesarean section at 38 weeks gestation, but for financial reasons, she decided to wait until she could go into spontaneous labor. Labor in women with uterine scar should be continuously monitored in order to diagnose early imminent uterine rupture or dehiscence. Since our parturient was received at full dilatation with the head almost at the vulva, this could not be done anymore. Nevertheless, auscultation of fetal heart rate at arrival revealed no anomaly showing that the scar was intact. Indeed, it has been shown that fetal heart bradycardia is the first sign of uterine dehiscence.<sup>5,6</sup> To be certain that there was neither uterine dehiscence nor uterine rupture, we conducted a gentle uterine scar exploration even though this is not admitted by most authors.<sup>7</sup> We found an intact uterus. We were therefore surprised that a woman with a past history of 3 CS who had never delivered vaginally could do so.

In women with 3 previous uterine scars, trial of scar may be risky. The policy should be an elective cesarean section. But if such women are already in advanced labor where vaginal birth is inevitable and that various relevant parameters are stable; they should be allowed vaginal delivery without resorting to cesarean section which would probably increase maternal and fetal morbidities.

The CPD observed during the 1st delivery was certainly due to immature pelvis given that she was only 18 years old and birth weight was 3200 g. This can be confirmed by the fact that she delivered vaginally later in 2011 of a newborn who weighed 3547 g.

Some authors believe that trial of scar can be conducted in women with double scarred uterus.<sup>8</sup> This case report is in favour of it because if our patient had delivered after 3 CS, she could have delivered a baby with a normal weight after 2 CS too.

### CONCLUSION

This case report confirms the fact that safe vaginal delivery is possible in some well selected women with multiple scarred uteri, although trial of scar may be risky in women with 3 previous uterine scars. Hence, obstetricians should establish criteria for trial of at least a double scarred uterus in well selected women given that the risk of morbidity and mortality increases with the increasing number of CS.<sup>9,10</sup>

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