

Factors Influencing Successful Vaginal Birth after Cesarean Delivery

Wassan Yassen Alani, MRCOG, Arab Board Part 1*
Nawal Dayoub, MRCOG, MSc Reproductive**

Background: Cesarean delivery is one of the most common procedures performed worldwide; women giving birth by cesarean delivery are increasing over the past several decades. The demand to decrease the rate of repeat cesarean is an international drive. This goal needs to be achieved through safe approach.

Objective: To evaluate the factors of successful Vaginal Birth after Cesarean (VBAC) Delivery.

Setting: Bahrain Defence Force Hospital, Bahrain.

Design: A Retrospective Study.

Method: Cesarean section patients who had an attempt at vaginal delivery between 1 January 2014 and 31 January 2015 were reviewed. Maternal age, gestation age, maternal weight, birth weight, fetus sex, previous vaginal delivery, previous VBAC, cervical dilation and other patient's characteristics were documented.

Data was analyzed using StatsDirect software and P-value of less than 0.05 was considered statistically significant.

Result: Five hundred sixty-eight patients with history of one previous cesarean delivery attempted VBAC. Successful VBAC was documented in 236 (41.5%). We found significant successful VBAC in patients with previous vaginal birth, high parity, presented with cervical dilatation more than or equal to 4 cm, male fetus and patients with induced labor ($P<0.0001$). Other factors negatively affected the success rate, such as recurrent cause for previous cesarean ($P<0.0001$), short interval ($P<0.0001$), ethnic background ($P=0.0006$), and IVF pregnancies ($P=0.0106$). Patient and fetus weights did not affect VBAC outcome.

Conclusion: Previous vaginal birth, advance cervical dilatation, induction of labor and proper interval after Cesarean increase the success rate of VBAC. Factors which negatively affect the vaginal birth after Cesarean are the history of recurrent indication and maternal diabetes.

* Senior Resident

** Consultant – In Vitro Fertilization
Obstetrics and Gynecology Department
Bahrain Defense Force Hospital, Royal Medical Services
The Kingdom of Bahrain
E-mail: wassan.alani@yahoo.com