



BRIEF COMMUNICATION

Vaginal birth following two cesarean sections

V.K. Garg*, E.N. Ekuma-Nkama

Department of Obstetrics and Gynecology, Al Hasa Health Center (Saudi Aramco Medical Services Organization), Saudi Aramco, Al Hasa, Saudi Arabia

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Incidence of cesarean sections has escalated in recent years. Inasmuch as cesarean section is associated with increased maternal morbidity [1], longer hospital stay, higher cost and no improvement in perinatal morbidity, and trial of labor is successful in 60–80% patients with one low transverse uterine incision even when the indication was “cephalopelvic disproportion,” it is recommended that patients with two or more previous lower uterine segment cesarean deliveries wishing to attempt vaginal birth (VBAC) should not be discouraged in the absence of contraindications [2].

Few studies have evaluated vaginal birth after two cesarean sections (VBA2C), so we conducted a study in selected patients. During the patients' prenatal visits, appropriateness, success and complications with VBA2C and cesarean section and

planned mode of delivery were discussed. Elective cesarean section was performed at patient's request or in the presence of previous classical or low vertical cesarean section, hysterotomy, myomectomy, nonvertex presentation, placenta previa or multiple gestation.

Induction or augmentation of labor was not performed inasmuch as several studies have shown an increased incidence of uterine rupture with oxytocin and/or prostaglandin use during VBAC. Zelop et al. [3] reported a 4.6-fold and 2.3-fold increased incidence of uterine rupture with oxytocin use during induction and augmentation of labor, respectively, and Lydon-Rochelle et al. [4] reported an increased incidence of uterine rupture with prostaglandin use (3.9% vs. 0.9%).

Two hundred five patients with two previous cesarean sections delivered between 1997 and 2002. Sixty-six delivered vaginally (32.2%), 71 had elective cesarean section (34.6%), and 68 underwent emergency cesarean section (33.2%). One hundred of the 205 patients attempted VBA2C, and 66 delivered vaginally (66%). Indications for emergency cesarean section were failure to progress (33.8%), malpresentation (17.6%), non-reassuring nonstress test (13.2%), prelabor rupture of membranes (13.2%), reduced fetal movements (2.9%), impending scar rupture (2.9%), antepar-

* Corresponding author. Tel.: +966 3 5772071; fax: +966 3 5772844.

E-mail address: gargvk@aramco.com (V.K. Garg).

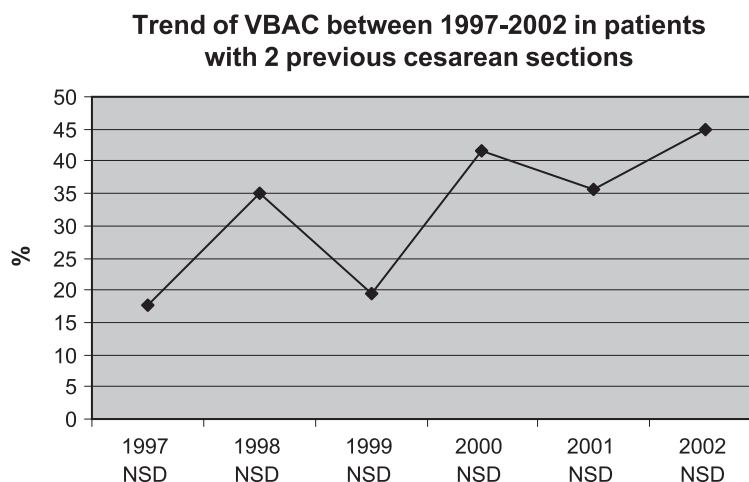


Figure 1 Trend of VBAC between 1997 and 2002 in patients with two previous cesarean sections.

tum hemorrhage (5.9%), pregnancy-induced hypertension (1.5%), previous inverted 'T' incision (1.5%) and patients changing their mind (7.4%).

Complication rate was higher in the cesarean section group than in the VBA2C group (19.5% vs. 4.5%), including puerperal pyrexia, wound infection, hematoma, partial or complete wound dehiscence, intraoperative bladder or bowel injury and urinary tract infection. Mean blood loss was more in the cesarean section group than in VBA2C group, necessitating blood transfusion in eight patients (680 vs. 265 ml). There was no scar dehiscence or hysterectomy in either group.

Mean hospital stay was longer in the cesarean section group than in the VBA2C group (6 vs. 2 days) without difference in fetal outcome, fetal weight, gestational age and parity. Eight patients with no prior vaginal delivery delivered vaginally. Two of these had undergone both cesarean sections for "cephalopelvic disproportion."

VBA2C rate increased between 1997 and 2002 (17.7% to 44.8%) reflecting increasing confidence in its safety in both obstetricians and patients (Fig. 1). The success rate varied amongst physicians from 10% to 69%.

Thus, VBA2C is reasonable and is successful with minimal complications if patient selection and labor management is judicious.

Acknowledgment

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Synopsis

Trial of labor in women with two previous lower segment Cesarean sections is a reasonable consideration and is associated with reduced maternal morbidity.