



## RESULTS OF THE NATIONAL STUDY OF VAGINAL BIRTH AFTER CESAREAN IN BIRTH CENTERS

Lieberman E, Ernst EK, Rooks JP, Stapleton S, Flamm B. Results of the national study of vaginal birth after cesarean in birth centers. *Obstet Gynecol* 2004;104:933–42.

Many women who have experienced a cesarean delivery desire to have a vaginal birth after cesarean (VBAC) in subsequent pregnancies. The success rate for VBAC has been variously reported between 50% and 80%. However, studies completed recently suggest that women who attempt a VBAC have an increased risk of serious adverse events. Uterine rupture, while rare, is estimated to occur in between 0.2/1000 and 2/1000 women with a uterine scar, with potential catastrophic results for both mother and baby. The outcomes for VBAC attempts in birth centers have not been well documented. This study collected data from 1913 women who intended to attempt a VBAC in 1 of 41 participating birthing centers across the United States between 1990 and 2000. Of the 1913 women, 460 did not go to the birth center for care during labor, having been referred to other services prior to labor. The remaining 1453 women presented to the birth center in labor; the occurrence of maternal/newborn complications, method of delivery, place of delivery, and indications for transfer to the hospital were evaluated. Indications for transfer to the hospital were divided into 6 categories: fetal condition, placenta/umbilical cord problems, maternal complications, delivery issues, failure to progress, and maternal “elective” transfers. The study specifically evaluated the occurrence of any serious adverse outcomes (i.e., maternal or perinatal death), uterine rupture, hysterectomy, and 5-minute apgar less than 7. The relationship between serious adverse outcomes and obstetric history (previous vaginal delivery and number of previous cesarean deliveries) and characteristics of the current pregnancy (birth weight and gestational age) was also examined.

Eighty-seven percent of the women who began labor at the birth center delivered vaginally. Nearly one fourth (24%) of women were transferred to the hospital prior to delivery, of which 37 (11% of the total transfers) were classified as an emergency. Of the 1106 women who birthed at the birth center, 3.8% were transferred during the postpartum period.

There were 6 uterine ruptures (0.4%), 7 perinatal deaths (0.5%), 1 hysterectomy (0.1%), and 15 liveborn infants with 5-minute apgar scores of less than 7 (1.0%). Only 2 of the 6 women with a uterine rupture experienced any of the other 3 serious adverse outcomes. Overall, 25 women (1.7%) experienced either a uterine rupture or another serious adverse outcome.

Women with more than 1 previous cesarean delivery were significantly more likely to have a uterine rupture than women with only 1 previous cesarean (3% vs. 0.2%). The occurrence of other serious adverse outcomes, other than uterine rupture, was greater for those women with a gestation greater than 42 weeks than for those with a gestation less than 42 weeks (6.5% vs. 1.6%), primarily due to a higher rate of perinatal death (4.3% vs. 0.4% <42 weeks).

In this study, over 50% of uterine ruptures and 57% of perinatal deaths involved the 10% of women with a history of more than 1 previous cesarean delivery or a gestational age of at least 42 weeks. Furthermore, the rate of uterine rupture and the perinatal death rate were each 0.2% for the 90% of women with neither of these 2 risk factors.

Based on the results of this study, the authors recommended that all women with a previous cesarean delivery be advised to attempt VBAC only in facilities with immediate access to emergency delivery.

During the 1980s and 1990s, women were encouraged to attempt VBAC by health care providers who were generally reassured by research suggesting that VBAC was safe for women with a single, low, transverse, uterine incision. Free-standing birthing centers were similarly reassured, and began to allow VBAC in these facilities during the 1990s, in part due to high demand from clientele. However, recent studies such as the one described here have prompted many providers, facilities, and professional organizations to advise that VBAC be attempted *only* within facilities that can provide for emergency delivery. Additional attention must be given to ensuring that women who choose VBAC also have access to certified nurse-midwives within the facilities designated appropriate for these women.

## PREVALENCE AND CHARACTERISTICS OF IRRITABLE BOWEL SYNDROME AMONG WOMEN WITH CHRONIC PELVIC PAIN

Williams RE, Hartmann KE, Sandler RS, Miller WC, Steege JS. Prevalence and characteristics of irritable bowel syndrome among women with chronic pelvic pain. *Obstet Gynecol* 2004;104:452–8.

Pelvic pain affects an estimated 1 in 7 women and accounts for about 10% of ambulatory gynecologic visits. It is the reason for 20% to 40% of laparoscopies and 10% to 15% of hysterectomies. Estimates of associated health care costs are \$500 million in office visits to a gynecologic practitioner, \$250 million in visits to nongynecologic practitioners, and more than \$115 million in visits to mental health professionals.

Chronic pelvic pain can be a diagnostic dilemma for clinicians. It may originate in or result from pathology of the reproductive or other organ systems, including the