# Birth After Cesarean: A Primer for Success Issue 89, July/August 1998 Diana Korte

Although VBACS--vaginal births after cesarean--have been occurring all over the US in small numbers for most of this century, the medical profession now welcomes them with unprecedented enthusiasm. In 1995 (the latest available year), 35.5 percent of US women who had previously given birth by cesarean had vaginal births subsequently--almost six times the rate of the previous decade. And the number of vbacs in this country keeps climbing, pushed upward by some combination of medical research, consumer desire, and insurance company directives.

A mountain of research shows that both babies and their mothers benefit from a subsequent vaginal birth. According to the American College of Obstetricians and Gynecologists, the American Academy of Pediatrics, the American Academy of Family Physicians, and midwives everywhere, babies are healthier, mothers have fewer problems, and both go home from the hospital sooner after vaginal births.

## **Advantages for Babies Born Vaginally:**

Babies born vaginally are usually born when they're ready, rather than prematurely by surgery. On average, babies born by cesarean have lower birthweights and have completed fewer weeks of gestation than vaginally born babies, which suggests that many cesareans occur before labor begins. These babies account for the majority of admissions to high-risk nurseries. Although some of them are born before their due dates because of medical emergencies that threatened their or their mothers' safety, others are probably born too soon because labor was induced or because the cesarean was scheduled ahead of time, according to a miscalculated due date. These problems are less frequent with cesareans performed after labor begins naturally.

Babies born through the birth canal have the benefit of a surge of the hormones called catecholamines, which are essential for survival. These hormones, one of which is adrenaline, are found in much higher levels in vaginally born babies. <sup>4,5,6</sup> Catecholamines are secreted by the infant's adrenal glands, which lie atop the kidneys and are released in the baby in high amounts during labor, sometimes changing the fetal heart rate. They prepare the infant for survival outside the womb.

Catecholamines help to clear the infant's lungs in preparation for normal breathing, speed up the metabolic rate for quick stabilization, and promote a rich supply of blood to the heart and brain. The catecholamine surge of a vaginally born baby keeps a newborn alert for some time. These hormones also dilate eye pupils, probably in preparation for the "falling in love" bonding that takes place at birth between baby and parents.

Babies born through the birth canal are much more likely to be born with healthy lungs. Respiratory distress syndrome, sometimes known as hyaline membrane disease, is a condition in which the baby's lungs are not strong enough to get sufficient oxygen to body tissues. This problem, which is aggravated by anesthesia (in particular, general anesthesia) and lower levels of catecholamines, is 20 times more likely to occur in babies born by cesarean prior to the onset of labor. 7,8,9,10,11 In

addition, these babies are more likely to be on mechanical ventilators in neonatal intensive care nurseries than infants with other respiratory illnesses.

Babies born vaginally have higher Apgar scores. Of course, it makes sense that a baby in distress that needs to be delivered by cesarean might have a lower Apgar score--especially one born to a woman who had general anesthesia (rarely used) instead of regional anesthesia. In a 1995 study of uncomplicated, full-term pregnancies, most babies, regardless of how they were born, did not require nursery stays or breathing support. However, when the 10,871 vaginally born babies were compared to those 538 infants born by elective cesarean because of a too-big baby, a too-small pelvis, or a too-slow labor, there were marked differences. The surgically born babies were more likely to need intermediate or intensive care at birth, along with respiratory support, and were more likely to have one-minute Apgar scores of less than  $4.^{12}$ 

Babies born vaginally can enjoy early, frequent contact with their mothers. A woman who has a cesarean often gets only a glimpse of her baby immediately after birth. Sometimes a baby is taken away quickly to be checked, partially because he or she may have a higher risk for a number of newborn problems. The mother will remain in the operating room to have her incision sewn up, and then move on to a surgical recovery area. A woman who gives birth vaginally, on the other hand, can eat, drink, and move around as well as feed and care for her newborn immediately, if she so desires. When a VBAC mom takes her baby home, she's much more likely to be able to give her newborn more attention, because she is not recovering from surgery and does not have the accompanying postoperative pain.

Babies born vaginally are much more likely to be breastfed and to be nursed for a longer time span. The first days of a baby's life are critical to breastfeeding success, and successful breastfeeding is easiest when the early stimulation of the breast created by the baby's sucking produces a bountiful milk supply. Giving birth vaginally makes this process much easier. For example, when babies are with their mothers uninterrupted for the first hour after birth, after 20 minutes or so, most infants will begin rooting motions and, if given the opportunity, will make crawling movements toward the breast in an effort to latch on. Likewise, babies who "room in" with their mothers from birth, and who nurse at will, gain more weight and nurse well sooner, on average. Off to a good start, these are the same babies who probably will nurse for more months overall.

### Advantages for Mothers Who Have VBACS:

With a VBAC, the risk for infection after the birth drops from as high as 35 percent (with a cesarean) to 2 to 4 percent. <sup>13,14,15,16</sup> Different hospitals and researchers report varying infection rates associated with cesarean births, with and without the use of antibiotics. Typically, using antibiotics before surgery reduces the infection rate, but, unfortunately, antibiotics are not always effective. In addition, some postcesarean infections don't show up until a mother has gone home--a particular concern, given today's shorter hospital stays. Infections that occur after the mother has left the hospital are unlikely to show up in studies because most researchers gather information from women's hospital records alone.

Other surgical hazards increase, including extra blood loss, the need for blood transfusions, urinary tract damage, and placental disorders. Additional risks related

to cesarean surgery include a return to the hospital for repairs, along with a risk for abscess, peritonitis, and gangrene. As with any other major abdominal operation, surgery opens up a higher risk for hemorrhage, and as many as 10 percent of women who have cesareans need blood transfusions. The average blood loss from a vaginal birth is about a pint; from a cesarean, almost a quart.

Other possible surgical consequences are a temporary paralysis of the bladder and bowel, a hysterectomy, a retained piece of the placenta (which occasionally happens after a vaginal birth, too), or a surgical item left in the body, which requires follow-up surgery. An infrequent injury, but one that is three times more likely to occur with repeat cesareans than with a first cesarean, is urinary tract damage associated with dense bladder adhesions from the first surgery. <sup>17</sup>

The chances of developing dangerous placental problems during pregnancy, such as placenta previa (the placenta covers the birth canal opening) and placenta accreta (the placenta grows into the wall of the uterus), increase significantly with subsequent cesareans. Sometimes this happens because the surgeon makes a new uterine incision rather than cutting open the old scar. In this case, although a woman may have only one visible scar on her abdomen from all of her surgeries, her uterus will have one scar per cesarean. Each of these placental disorders occurs on average two to three times more often than uterine rupture occurs in VBACS. 18,19

The ultimate cesarean tragedy, of course, is a rare one: the death of the mother after childbirth. Women who have cesareans are two to four times more likely to die after childbirth than women who give birth vaginally. Many of those who die, it should be noted, are categorized as "high-risk" during pregnancy or develop unusual problems during childbirth. In 1993 at least 302 women died out of the nearly 4 million women who gave birth. (The National Center for Health Statistics and other researchers estimate that, because of poor reporting, this number might be three times higher.) Among the leading causes for maternal death are hemorrhage, complications resulting from general anesthesia, hypertensive disorders, infection, and pulmonary embolisms. There have been no published reports of a healthy woman dying after a uterine rupture that occurred while she attempted a VBAC in a hospital.

Of course, complications can and do occur with vaginal births. However, if you compare a "routine" cesarean and an uncomplicated vaginal childbirth, it's safe to say that the risk of complications increases with surgical birth.

Women who give birth vaginally recover more quickly, sometimes by many months. Although some medical literature suggests that recovery from a cesarean should take only four weeks, that's not what many women say. One study reported that six weeks after the birth, about one-third of women who had cesareans had regained their usual energy, while three-quarters of the women who gave birth vaginally had done so by that time.<sup>22</sup>

Other research shows that at least one-quarter of women who had cesareans were still not fully recovered at six months postpartum, and most found the recovery period to be much more difficult than they had anticipated. 23,24

Women who give birth vaginally feel more attached to their babies sooner. Parentchild bonding is an experience that takes a lifetime, but research confirms that the first mother-baby tie can begin mere moments after birth. According to bonding researchers Marshall and Phyllis Klaus and John Kennell, a healthy newborn will stay awake and alert for 40 minutes during his first hour of life and will experience 10 percent of his first week in this intense state.<sup>25</sup>

Women who have VBACS are quick to comment on the differences in their contact with their newborns in the first hours and days in comparison to their postcesarean experiences. It's true that women who have cesareans can have constant help from family and friends in the hospital, allowing them to spend more time with their newborn than otherwise might have been possible. However, the fatigue and pain from the surgery make it difficult, if not impossible, for many of these mothers to hold and feed their babies as much as they would like, and sometimes illness can separate mother and baby.

With a vaginal birth, the parents will probably save out-of-pocket money because of a shorter hospital stay, no operating-room costs, and fewer drugs and less anesthesia. Between higher physician and hospital birth costs and increasing insurance copayments, few families will get away without paying something. In 1995 a hospital vaginal birth averaged \$6,378, and a cesarean, \$10,678, according to the American College of Obstetricians and Gynecologists.

#### How to Plan a Successful VBAC

Once you understand why you had a cesarean, how those circumstances might affect your next labor, and what you might do to avoid another cesarean, it's time to figure out exactly what you need to do to plan a successful vbac. Here are suggestions.

Take responsibility for what happens to you. Many doctors and nurses do not believe they have a responsibility to educate you about VBAC, though it's helpful and appreciated when they do. That's your job. You can find information and support from childbirth organizations and teachers, who will have recommended reading lists and vbac information handouts. The Internet has dozens Of VBAC sites. When you are searching for your VBAC-friendly doctor or midwife, take into account your cesarean history. If your cesarean was due to your baby's being in a posterior position, for example, find a birth attendant who will help you prevent another posterior. Always look for someone, whether midwife or doctor, who has lots of experience with the matters that concern you.

Have your VBAC at the safest place for you. Research shows that births at birth centers and those at home--when women are well-nourished and have had prenatal care--are as safe as hospital births. A 1989 study of birth centers with certified nurse-midwives showed that women's satisfaction with their births was high and that the cesarean rate was less than 5 percent--one-fifth of the US rate at the time. <sup>26</sup> Research on the safety of VBACS has studied only hospitals, with the exception of one large 1997 VBAC study of out-of-hospital birth centers affiliated with the National Association of Childbearing Centers. Forty-five birth centers around the country participated in the study, which looked at more than 1,000 VBACS. To date, there have been no published studies on the safety of vbac births at home.

Healthy babies can be born and good experiences had no matter where and how you have your baby. Trust your own opinions. As you're weighing safety issues and interviewing possible birth attendants and hospitals, ask yourself, "With whom and

where would I feel safest?" And when you've made your choice, embrace it as the best option for you.

Avoid people--whether family, friends, or coworkers--who will discourage you from seeking a vbac. Protect yourself and your unborn child from criticism for something you know is the right thing to do. Although VBACS are more common than they once were, some people will be negative, regardless of whether they know anything about them. If you want, give them some reading material on vbacs. If the people closest to you continue to fret, ask them to keep their concerns to themselves while you are pregnant, and have others keep them occupied while you are in labor. Don't feel obliged to constantly reassure the same people that VBACS are safe.

Eat well and exercise regularly. No matter how the babies are born, mothers and their babies always fare better when moms are well nourished during pregnancy, preferably starting before conception. The current recommended weight gain is about 35 pounds, though there is some evidence that weight gains above that are fine if the mother eats according to her appetite. Weight gains of less than 25 pounds are not recommended.

Eat fresh vegetables and fruits whenever available. Pay particular attention to foods that are rich in vitamin E (cold-pressed vegetable oils, dark green leafy vegetables, legumes, nuts, seeds, and whole grains). Vitamin E promotes healing and is necessary for tissue repair. Some research suggests it strengthens scars.

Just as a healthy diet benefits you and your baby, so does at least 30 minutes of exercise three times a week. For most pregnant women, the exercise of choice is walking. According to some researchers, other safe activities are golf, swimming, jogging, aerobic dancing, cross-country skiing, bicycling, and racket sports.

One 1990 study found that women who continued their prepregnancy running or aerobics programs, as compared to women who had stopped exercising, had fewer cesareans and shorter labors, and their babies had fewer indications of fetal stress. Of course, common sense should role. If you have any doubts about running or aerobics, discuss them with your doctor or midwife.

Running and aerobics aren't for most women, though. Other research has indicated that regular exercise, including walking, results in shorter labors, especially the pushing stage. In numerous studies, women who exercise had fewer and less intense pregnancy complaints, such as morning sickness, lower back pain, headaches, fatigue, and shortness of breath. Many find regular exercise to be a depression reliever as well. Exercise during pregnancy can keep you in better shape after the baby is born, and it can improve your heart and lung capacities.

Squatting is usually not listed as a pregnancy exercise, but it ought to be, because it increases mobility in the pelvic joints. Work it into your daily life--while playing with or helping small children, picking up things from the floor, or gardening. Episiotomies are not common in Asia partially because women squat when they go to the bathroom instead of sitting on toilets.

Kegel exercises will strengthen your vagina and birth canal. To do Kegels, first isolate the pubococcygeus (pc) muscle: sit on the toilet, start to urinate, then stop. That muscle you feel when you start and stop urinating is the pc muscle. Several

times a day, make quick squeezes of the pc muscle to the beat of your heart. At other times, hold the squeeze for 10 seconds before releasing. Aim for a total of 15 minutes of Kegels a day. Some women make Kegel exercising part of their lives, pregnant or not. You can do them anytime, anywhere. Practice the "squeeze" at a stoplight or while standing in line at the bank.

Discuss with your healthcare provider what a reasonable amount of exercise is for you, particularly if you have a history of premature labor or vaginal bleeding, or a heart condition, or if she suspects that your baby might be small for gestational age. A regular exercise regimen may mean that your baby might weigh a few ounces less than babies born to more sedentary women.

Always know your options. Understand what's possible. Do your homework about all aspects of a VBAC that are important to you. Speak up and make your preferences known. Change doctors, midwives, or the place of birth if you need to, even at the eleventh hour. Knowing your options will make you much more able to embrace whatever happens. You might think that changing your birth attendant in the last trimester or the last few weeks would be traumatic, but it's not if it's intentional. It's usually not difficult to find a doctor or midwife to take you into her practice at the last minute. Just make sure you check your insurance coverage. Lots of people change doctors for all sorts of good reasons. It's important to let the first doctor's office know, but you don't have to be apologetic. Once you've selected your new doctor or midwife, either ask for a copy of your file yourself or have your new birth attendant request a file transfer.

#### For More Information

Birthrites: Healing After Caesarean 61-08-933-762-49 (Australian phone) edsitewa.iinet.net.au/bacup

Nancy Wainer Cohen 10 Great Plain Terrace Needham, MA 02192 617-449-2490 cmousse2@aol.com

C/SEC, Inc. 22 Forest Road Framingham, MA 01701 508-877-8266 Send SASE.

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#### Notes

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