

## Dr. Ben-Yehuda's Newsletter June 2011

**Disclaimer:** *This newsletter is devoted to Dr. Ben-Yehuda's areas of interest that coincide with topics recently raised by my patients. This general information should not replace a personalized consultation with your physician.*

June 2011: VBAC (Vaginal Birth After Cesarean Section)

In March 2010 the National Institutes of Health (NIH) published a report titled "Vaginal Birth After Cesarean: New Insights." I will summarize some of their findings below. First, some general statistics.

In 1996, the total C/Section rate in this country was 21%. In 2007, it was 32% (the highest ever recorded). In 1996 the VBAC rate was 28% (about 1 in 4 women who had a C/Section and attempting another delivery, were trying to deliver vaginally). By 2007, the VBAC rate was about 10%. Given these significant trends, the NIH wanted to find out why things changed so rapidly in 10 years. The following questions and answers mirror the discussions I have with my patients who are considering a VBAC.

Q: In women who attempt VBAC, what is the rate of vaginal delivery? What factors influence that rate?

A: 74% of women who try VBAC succeed. Factors that INCREASE the likelihood of success include: Being "thinner" (BMI <30Kg/m<sup>2</sup>), having had a previous vaginal delivery, and if the prior C/Section was due to malpresentation (breech - a baby born buttocks first). Factors associated with a DECREASED chance of delivering vaginally include: Presence of maternal disease (hypertension, diabetes, heart disease, etc.), if the prior C/Section was done for failure of progression of labor (baby too big to fit), being currently past the due date, and being induced with the current pregnancy.

There are some statistics that will be presented below. Please keep in mind that statistics can be interpreted in two different ways: relative risk, and absolute risk. I will highlight the difference while using the NIH's own numbers and try to make sense of it all in the end.

Q: What are the benefits/risks to MOTHERS in VBAC attempts?

A: Benefits include:

1. Decrease in maternal mortality (4/100,000 die in VBAC attempts, 13/100,000 die in elective C/Sections). INTERPRETATION: While the relative risk of dying after a C/Section may seem significant (3 times as many women die after an elective C/Section than a VBAC attempt), the overall risk of dying from an elective C/Section is just 0.013%.

2. Shorter time in the hospital.

3. Decreased risk of blood clots (40/100,000 VBAC vs. 100/100,000 in elective C/Sections). INTERPRETATION: More than twice as many women who have elective C/Sections get blood clots, but the chance they will get a blood clot is only one per 1000.

4. Decreased risk of placenta covering the cervix and placenta invading the uterine muscle in subsequent pregnancies.

Risks include:

Uterine rupture (a separation of the uterine muscle, creating a hole in the uterus). This is the most-discussed risk of VBAC. It occurs in 778/100,000 women attempting VBAC vs. only 22/100,000 women having an elective repeat C/Section. In other words, the overall risk of uterine rupture in women attempting VBAC is less than 1%. If the uterus ruptures, 14-33% of women will need a hysterectomy to stop the bleeding.

We can't tell who will have a uterine rupture. If this happens, the chances that a baby dies are about 6% (see the next section on fetal risks/benefits). That's 6% of the 778/100,000 that had a rupture, or 0.047% chance of a baby dying of this when a mom tries VBAC.

Q: What are the benefits/risks to a BABY with VBAC?

A: Benefits include:

1. Less risk of rapid breathing due to incomplete squeezing of baby's lungs that occurs in a C/Section

2. Better breast feeding success, and less interference with mother-infant bonding.

Risks include:

1. An increase in neonatal (1st 28 days of life) mortality rate. Mortality rate for infants of mothers who attempt VBAC is 110/100,000 compared to 50/100,000 in elective C/Section patients. INTERPRETATION: Twice as many babies die with VBAC attempts, but the overall chance of a baby dying within the first 28 days of life after VBAC trial is 0.11%.

2. Increased risk of cerebral palsy risks or strokes. Risk of cerebral palsy or stroke with VBAC (based on one large study of 33,000 patients) is 46/100,000 vs. zero/100,000 in the C/Section group. INTERPRETATION: The largest study examined by the NIH shows that in babies of moms attempting VBAC, 0.046% will have cerebral palsy or stroke.

Q: If the overall risks of VBAC are small, why are they not offered more?

A: Professional liability concerns are important in limiting the option/discussion on VBAC. About 1/3 of obstetricians do not even offer VBACs due to this. When doctors are concerned about this issue, it may also influence HOW the risks of VBACs are presented to a patient. For example, a physician who prefers not to do VBAC may emphasize the relative risk and say “you know, you are twice as likely to end up with a dead baby if you try VBAC vs. an elective repeat C/Section.” As you can imagine, this can greatly impact a woman’s decision.

In summary, VBAC discussions require a thoughtful and meaningful investigation into BOTH risks AND benefits. They involve explanation of ACTUAL vs. RELATIVE risks, and require personalized risk assessment. All this requires time, something that many obstetricians have less and less of.

I will close with the following quote from the National Institutes of Health report: “When trial of labor and elective repeat cesarean delivery are medically equivalent options, a shared decision making process should be adopted and, whenever possible, the woman’s preference should be honored.”

VBACs are a regular part of my practice. My patients are afforded the time and environment to discuss this option before making an important decision about their delivery.

For more: The full study referred to above can be found at <http://consensus.nih.gov>

*Next Month:* The latest on how to prevent and treat bladder infections.