March 10, 2008

Dear Ms. B,

I was asked to respond to your letter inquiring about Hospital’s VBAC policy. Your letter is well written and asks some valid questions. I will do my best to answer your questions by giving you a historical perspective as well as direct answers.

Although my primary role involves patient care and administrative duties, I continue to lecture across the country on a variety of obstetrical subjects, with the "Risks and Benefits of Cesarean Section" and "Risks of VBAC" being the two most requested talks I give. I have personally delivered, or supervised the delivery of over 15,000 births, and continue to be involved in over 5,000 patient encounters per year.

Historically, when Cesarean sections were being performed 40 years ago they were performed through vertical uterine incisions. These incisions were found to have a uterine rupture rate of 6% in subsequent labors, therefore the standard then was clearly "once a Cesarean, always a Cesarean". With the advent of transverse uterine incisions, it was found that women presenting in labor prior to their surgery had a much lower uterine rupture rate than previously documented, and hence the VBAC was born. Unfortunately, the new uterine rupture rate was simply not known.

{corrective commentary: that phrase, when coined 92 years ago, was not a anti-VBAC statement. Here is the history of that phrase from ACOG (Obstet Gynecol 1997;90:312-5. c 1997 by The American College of Obstetricians and Gynecologists):

"The phrase, "once a cesarean, always a cesarean" dates back to an
article by Edwin Cragin entitled "Conservatism in Obstetrics" published in 1916. Although cesarean delivery rarely was performed in that era, Cragin’s purpose was to urge physicians to avoid unnecessary cesareans. He termed the cesarean operation "radical obstetric surgery" and urged his colleagues to practice sound obstetrics to avoid having to resort to it. The famous "once a cesarean, always a cesarean" phrase came in the final paragraph of the article and clearly was meant to emphasize that one of the risks of a primary cesarean is that repeat operations might be required. Interestingly, the author went on to point out that there are many exceptions to this rule and that one of his own patients had 3 vaginal births after cesarean without difficulty. This is remarkable given that vertical uterine incisions were standard at that time. The low transverse uterine incision would be championed by Kerr a decade later.”

In the 70’s, Women’s Right’s groups as well as insurance companies trying to increase profits, pushed the VBAC fury to a point where many institutions began forcing women to VBAC against their wills. Those of us who knew the procedure was not benign complained of inadequate consent for their patients, and women’s loss of autonomy. It was not until almost 20 years later, that good modern VBAC data was available, and that the 1/200 (0.5%) uterine rupture rate was documented.

Once the data was available, questions were raised worldwide as to the appropriateness of the procedure. Here at Hospital, our own obstetricians discussed for over 3 years the both the Ethics and logic behind the VBAC controversies. The key question is simply whether or not a 1 in 200 risk of fetal death is "acceptable", and *whether or not a woman has a right to make that decision on behalf of an unborn term fetus*. Ultimately, the argument was made that most people would not board an airplane that had a 1 in 200 risk of crashing.

[Corrective commentary: The 2004 VBAC study by Landon et al stated: "Overall, our data suggest a risk of an adverse perinatal outcome at term among women with a previous cesarean delivery of approximately 1 in 2000 trials of labor (0.46 per 1000), a risk that is quantitatively small but greater than that associated with elective repeated cesarean delivery." In other words, while the rate of uterine rupture in a spontaneous labor with one prior cesarean is approximately 1 in 250 (0.4%), 1 in 2000 (0.05%) VBAC babies will have a bad outcome.]

Moreover, we do not allow events to transpire that carry a much lower risk. For example, it is illegal for a mother to take her newborn baby home from the hospital without a child protective seat (and most parents would not think of doing such a thing). Yet, the risk of actually being in a car accident on the way home from the hospital is about 100 times less than the risk of a VBAC.
Discussion then took place regarding how good we are at saving mothers and babies that have catastrophic events such as uterine ruptures. We concluded that "being good" at dealing with disasters was not a good reason for inviting them. Moreover, in the airline analogy, if we were to invite mom’s to board an airliner that had a 1 in 200 risk of crashing, telling the passengers that only a small percentage of the people onboard would actually die because the hospital and the doctors are good at what they do, is not likely to change their original opinion of declining the flight.

Answering some of your other questions:

*I am concerned that if [Hospital] can’t meet the staffing standard for VBACs, that means the hospital doesn’t have the ability to perform an emergency cesarean 23 hors [sic] a day/seven days per week.*

[Hospital] is ready to perform emergency cesareans 24×7. In fact, we are remarkably good at it, and can boast about some of the best outcomes in the world. Not meeting some of the recommended requirements for VBAC does not infer a lower standard. *Even though we do not have ‘in-house’ anesthesia 24 hours per day, our surgical response time in many cases is better than larger institutions with "in-house" staff.* A large University setting may have in-house staff but simply walking from one side of campus to the other may take more time than driving in from home in our small community. *Moreover, the volume at some of these large centers and logistic delays often encumber those institutions and negatively impact on their response time, whereas [Hospital] has the ability to mobilize and act quickly when needed.*

Nevertheless, being good at handling emergencies is not justification for inviting them. *There will always be emergencies in medicine that cannot be staffed or prepared for.* It is a sad fact of life that some women in labor will have heart attacks, and some will have brain tumors or brain aneurysms, and some will have emboli, but no system can have a Cardiologist, a Neurosurgeon, and a pulmonologist available on site 24 x 7 waiting for these things to occur.

We identify these challenges, and we set systems and protocols in place to efficiently **handle these emergencies with available resources**. These systems work remarkably well, and fortunately in the majority of cases there is enough time for the mobilization of resources to result in the best possible outcome.

*The cesarean rate in this country has risen well above the World Health Organization’s recommended rate of 10%-15%.. I am concerned that the cesarean rate in [our city] is so high...*
The WHO recommended cesarean rate is not based on data. In fact, there are no good published recommendations for cesarean rates that are based on data. That is for a very good reason, and the reason is that the optimal cesarean rate depends on the goal desired. **If the goal is to optimize neonatal outcome, one can make a very clear and elegant mathematical argument that the cesarean rate should be almost 100%,** and that is not a statement that appeals to many, therefore the issue is left mute. When looking at the morbidity of cesarean sections at term, the majority of complications arise from surgical intervention after failed attempted vaginal delivery. The actual equations get quite complicated, and depend on multiple factors including the health of the mother, and the planned number of Cesarean sections, and timing between pregnancies.

When attempted vaginal deliveries are removed from the equation, such as in elective cesarean deliveries at term without labor, the outcomes are much better for the newborns than in vaginal deliveries and the morbidity to the mother can be equivalent or even lower than in attempted vaginal deliveries. Although we do not consent women for vaginal deliveries, the risks of attempting a vaginal delivery are actually quite high, and carry many of the same risks, if not more, than cesarean sections. Realize that Cesarean delivery virtually eliminates the risk of birth trauma. The numbers you quote for fetal injury during Cesarean section are not accurate. I can tell you the rates you report for newborn injury from Cesarean delivery would not be tolerated and would certainly be identified by quality assurance measures.

You quote statistics in this part of your letter, which are not accurate. The complication rates for Cesarean sections in the last 20 years have dropped to levels that now are arguably safer than vaginal delivery, and although retained neonatal lung fluid is a very real increased morbidity to the newborns, it carries no long term sequelae in the absence of prematurity, and is more than compensated for by the benefits.

Delivering premature babies, whether by cesarean or vaginal delivery, both have the long-term implications you suggest but are not associated with the route of delivery.

*I am concerned that [Hospital] is understating the risks of primary or subsequent cesarean surgeries yet exaggerating the risks of VBAC*

The risks of VBAC are very real. The 1 in 200 risk is an average risk of "catastrophic" uterine rupture taken from many studies across the country. They do not count smaller ruptures whereupon the baby has not "fallen out" of the uterus yet, as these are often called "windows". This leads to the variations in the reporting of uterine rupture. Those of us who provide care on a regular basis can tell you
we see these ruptures frequently, even in the absence of VBACs. I have seen 3 in the last 6 months at [Hospital]. All were handled well and had good outcomes, but even when trying to minimize these events they happen due to factors beyond our control. The national death rate from Cesarean sections is less than 1 per 100,000 in most studies. Unavoidable death due to pregnancy complications unrelated to route of delivery is 1 in 10,000. When comparing these risks of uterine rupture in VBAC of 1 in 200, you see that the equation very much supports our decision to take the safest route and discourage these procedures.

In summary, the physicians at [Hospital] are very much aware of the dichotomy between what is safest for the unborn fetus and maternal preferences and autonomy. These controversies are often complicated by lack of data, poorly understood data, and strong emotional components.

I can assure you that we strive to provide the safest medical environment while supporting as much of the autonomy and patient desires as possible. Nevertheless, we ultimately have to be true to ourselves, and do what science tells us is best for our patients, even if sometimes we cannot please 100% of the clients.

You may find it interesting that since our decision to not offer VBACs, the majority of our patients responded very favorable, with a majority of women reporting a feeling of freedom in not having to justify to others their desire to not VBAC. Although we expected a backlash of unhappy patients, we were pleasantly surprised to find the majority of women understanding the rationale and supporting our decision. I now receive less than 2 complaints per year on our decision to not offer VBACs at [Hospital.]

In fact, the greatest increase in our Cesarean section rate the last few years has come from women demanding a Cesarean delivery and refusing vaginal delivery. The acceptance of women’s autonomy and right to choose their mode of delivery has led to a significant number of women simply choosing Cesarean as the preferred mode of delivery.

If you continue to have strong desires to VBAC despite the risks involved, I am sure your obstetrical provider can help refer you to a University Center where the procedure is still being offered. Although the risks may not be lower there, they may have chosen to offer the service both for patients and for training of their residents.

Sincerely,

OB
This letter was so fascinating for me to read. I want to make a few comments...

Note the names of his two most requested topics: "The Risks and Benefits of Cesarean Section" and "The Risk of VBACs." So interesting that cesareans have benefits, yet VBACs only offer risk.

He says, "If the goal is to optimize neonatal outcome, one can make a very clear and elegant mathematical argument that the cesarean rate should be almost 100%." So I wonder of the 15,000 births he has been involved with, how many of those women had cesareans?

He quotes a 6% uterine rupture rate in vertical incisions, which seems very high to me. This is something I intend to research. If you have studies you can quote, please leave a comment with that information.

He says, "Historically, when Cesarean sections were being performed 40 years ago they were performed through vertical uterine incisions. These incisions were found to have a uterine rupture rate of 6% in subsequent labors, therefore the standard then was clearly 'once a Cesarean, always a Cesarean.'" Yet, that phrase, when coined 92 years ago, was not a anti-VBAC statement. Here is the history of that phrase from ACOG themselves (Obstet Gynecol 1997;90:312-5. c 1997 by The American College of Obstetricians and Gynecologists):

The phrase, "once a cesarean, always a cesarean" dates back to an article by Edwin Cragin entitled "Conservatism in Obstetrics" published in 1916. Although cesarean delivery rarely was performed in that era, Cragin's purpose was to urge physicians to avoid unnecessary cesareans. He termed the cesarean operation "radical obstetric surgery" and urged his colleagues to practice sound obstetrics to avoid having to resort to it. The famous "once a cesarean, always a cesarean" phrase came in the final paragraph of the article and clearly was meant to emphasize that one of the risks of a primary cesarean is that repeat operations might be required. Interestingly, the author went on to point out that there are many exceptions to this rule and that one of his own patients had 3 vaginal births after cesarean without difficulty. This is remarkable given that vertical uterine incisions were standard at that time. The low transverse uterine incision would be championed by Kerr a decade later.

He says, "Once the data was available [on the risk of uterine rupture with a transverse scar,] questions were raised worldwide as to the appropriateness of the procedure." This is something I want to look into further. I have done little research on VBAC philosophies outside of the USA.

He incorrectly states that 1 in 200 VBAC babies will die. Landon 2004 stated, "Overall, our data suggest a risk of an adverse perinatal outcome at
term among women with a previous cesarean delivery of approximately 1 in 2000 trials of labor (0.46 per 1000), a risk that is quantitatively small but greater than that associated with elective repeated cesarean delivery." In other words, while the rate of uterine rupture in a spontaneous labor with one prior cesarean is approximately 1 in 250 (0.4%), 1 in 2000 (0.05%) VBAC babies will have a bad outcome. I have more specific information on infant outcomes here.

The OB who wrote our letter above then says, "The key question is simply whether or not a 1 in 200 risk of fetal death is 'acceptable.'" I find it ironic that the risk of miscarriage from a first-trimester amniocentesis is greater than the risk of uterine rupture yet that risk is acceptable when women want a diagnostic test.

From the March of Dimes:

Serious complications from second-trimester amniocentesis are uncommon. However, the procedure does pose a small risk of miscarriage. According to the Centers for Disease Control and Prevention (CDC), between one in 400 and one in 200 women have a miscarriage after amniocentesis. . . Studies suggest that the risk of miscarriage after first-trimester amniocentesis may be 3 times higher than the risk after second-trimester amniocentesis.

So the risk of miscarriage in a first-trimester amniocentesis is between one in 66 (1.5%) and one in 133 (0.75%), whereas the risk of adverse perinatal outcome in a VBAC labor is one in 2000 (.05%). Miscarriage is death of a baby. Rupture does not equal death, as Landon 2004 established. Yet the March of Dimes describes the risk of miscarriage vis-à-vis amniocentesis as "small" while the number of VBAC-friendly hospitals decrease.

Why is it, when a woman wants a diagnostic test, this risk is ‘acceptable,’ yet when a woman wants a vaginal birth, the normal biological consequence of pregnancy, a smaller risk is unacceptable? I have yet to hear one person make a woman feel guilty about having an amniocentesis because she might kill her baby, yet it is quite common for women seeking VBAC to be treated as if they are accepting an excessive amount of risk. Yet, I have met women who will not VBAC because the risk is to great, yet, when their OB suggested an amniocentesis, they consent.

He says, "We concluded that 'being good' at dealing with disasters was not a good reason for inviting them." Is an unnecessary miscarriage from an amniocentesis a disaster? It certainly is for the mom. And I have to wonder, does he induce labor? Because that invites more risk as many hospital procedures do. More on that later.

He says, "The WHO recommended cesarean rate is not based on data." Yet, he did not offer any medical studies that show that women and babies are benefiting from the USA’s 31% cesarean rate. He only states that he believes babies would benefit from an almost 100% cesarean rate. I think
the burden of proof lies with the person wishing to impose surgery. Show us how women benefit. Show us how babies benefit. Show us how you can ensure that my baby is ready to be born at 38 weeks via scheduled cesarean. Prove to us that our babies won’t be in the NICU because they simply were not ready to be born and have problems breathing. A quick google search led me to this commentary from the medical Journal Epidemiology published in July 2007 which states:

Twenty years ago, the World Health Organization recommended that no more than 15% of deliveries should be delivered by C-section, pending evidence that higher levels benefit either mothers or their offspring. Of 60 medium- and high-income countries reviewed in a recent study, the majority (62%) had national rates of C-section above 15%. If we assume, based on the World Health Organization recommendations, that C-section rates above 15% lack medical justification, then there are 3.5 million medically unjustified interventions performed among these countries yearly.

This article cited World Health Organization. Appropriate technology for birth. Lancet. 1985;2:436-437 as the source of the WHO recommended 15% cesarean rate.

The commentary continues: (emphasis mine)

What are the consequences of these trends for the health of women and babies? To the extent that high rates of C-sections are not medically indicated [this includes repeat cesareans], they unnecessarily expose the mother and child to consequences that are not fully understood. In such procedures, the mother and her partner have no active participation in the birth of their child. The costs and benefits of this elective procedure, both physical and emotional, should be seriously explored before accepting the liberalization of its use.

Elective caesarean section may provide some benefits. A systematic review of 79 studies of elective C-sections versus vaginal deliveries, including observational and randomized trials, has shown that women with C-section have decreased urinary incontinence at 3 months and decreased perineal pain in comparison with those having a vaginal delivery. On the other hand, C-section was associated with a higher risk of maternal mortality, hysterectomy, ureteral tract and vesical injury, abdominal pain, neonatal respiratory morbidity, fetal death, placenta previa, and uterine rupture in future pregnancies. One limitation of observational studies is that the associations with poor outcomes could be due to the conditions that trigger the C-section rather than the C-section itself, despite statistical efforts to adjust for these confounders. Consequently, the strength of this evidence should be considered with caution.

Two recent reviews of observational or ecological studies have examined the association of C-section rates with maternal and neonatal mortality and morbidity. One is the study mentioned above, using data on 60 medium- and
high-income countries of all regions, and the other is based on data from Latin American countries. Both reviews found no evidence for reductions in maternal and neonatal mortality and morbidity with increases in C-section rates to above 10%. In fact, higher rates of C-section were associated with higher rates of maternal and neonatal mortality and morbidity. For example, Barros et al showed that, between 1982 and 2004, the C-section rate in one city in southern Brazil increased from 28% to 43%, whereas the preterm birth rate has increased from 6% to 16%. The increase in preterm births occurred despite improvements in socioeconomic and nutritional conditions in the population. The increase in C-section rates and also an increase in elective induction of labor contributed to this trend.

Our doctor from the hospital then discusses recent uterine ruptures. "Those of us who provide care on a regular basis can tell you we see these ruptures frequently, even in the absence of VBACs. I have seen 3 in the last 6 months at [Hospital]." This is very odd. Since the hospital does not ‘perform’ VBACs, we can imply that these 3 ruptures occurred to unscarred women. If you look at this post of mine, you will see that Dr. Marsden Wagner states that the risk of uterine rupture in an unscarred uterus is 1 in 33,000.

We know from medical studies that inducing, especially with Cytotec, results in higher rates of rupture. In VBACing women, the use of Cytotec to induce increases rupture rates to 1 in 20. This hospital had 2800 births annually. Using those numbers, approximately 1400 women gave birth during those 6 months. If he has seen 3 uterine ruptures in the last 6 months, that means 1 in 467 unscarred, non-VBACing women are rupturing at this hospital. That is an extremely high number - over 80 times greater than the 1 in 33,000 rate.

"You may find it interesting that since our decision to not offer VBACs, the majority of our patients responded very favorable, with a majority of women reporting a feeling of freedom in not having to justify to others their desire to not VBAC. Although we expected a backlash of unhappy patients, we were pleasantly surprised to find the majority of women understanding the rationale and supporting our decision. I now receive less than 2 complaints per year on our decision to not offer VBACs."

Clearly, the VBAC seeking women need to let their local hospitals know that they are not happy with this policy. I wonder, of the women seeking VBAC, what percentage went to the next closest hospital offering VBAC vs. had a home VBAC (HBAC) vs. had the repeat cesarean.

"In fact, the greatest increase in our Cesarean section rate the last few years has come from women demanding a Cesarean delivery and refusing vaginal delivery. The acceptance of women’s autonomy and right to choose their mode of delivery has led to a significant number of women simply choosing Cesarean as the preferred mode of delivery." Women have the autonomy
and right to choose their mode of delivery as long as it is not a VBAC. They
don’t have that right.

Ladies, this is what we are up against. Reading this letter makes me wonder
what is more likely: To convince hospitals like this to change their policy or
to educate women on home VBACs? I don’t think hospital with VBAC bans
are going to change their policy. Why should they? Scheduled cesareans are
easier for the OB and the hospital and it is certainly the fashion to not ‘do’
VBACs.

If we are going to change VBAC bans, we need to identify how permitting
VBACs are to the hospitals’ advantage. And I think the best way of doing
this is by affecting the hospitals’ pocketbook. If all hospital birthing women,
scarred and not, could ban together and birth ONLY at hospitals that permit
VBACs, that would make an impact. The question is, how do we accomplish
this?

My local hospital instituted a VBAC ban just last week and there is a part of
me that wants to ‘do something.’ But then I wonder, how many women will
‘discover’ homebirth/home VBAC/HBAC as a result of VBAC bans? How many
women will be forever changed by giving birth in their living room? How
many women will never have another hospital birth simply because their
local hospital wouldn’t permit it and those women had to either expand their
mind to homebirth or be cut once again?

There is a part of me that sees these VBAC bans as a positive thing. If we
couple publicity of these bans with information on homebirth, we could turn
this tide against VBAC around one woman at a time. In looking at the stats
for this website, one of the most common searches is on the legality of
homebirth, VBAC, and HBAC. I want women to know that it is legal to
VBAC. Just because you local hospital has banned it, or your local OB
doesn’t ‘do VBAC,’ doesn’t mean that it is illegal in your state. So many
women are told by medical professionals and hospital personnel that VBACs
are illegal. I don’t know if these med pros are actively lying or have been
mislead to think that VBACs are illegal, but they are not. I want women to
know that if their hospital has banned VBAC, you have options. There are
other ways to find VBAC supportive hospitals, OBs, and, of course,
midwives.

You do not have to have another cesarean. You can birth your child. A good
place to start? Join the ICAN email support group and start planning your
VBAC. Contact your local, county, and state representatives and tell them
that you want VBAC available in your local hospitals, that you want midwives
to be able to attend VBACs, that you don’t want to have surgery again.
Write your local hospital so they know that women are not happy with their
VBAC ban. And if you local hospital supports VBAC, send them a thank you
note and let them know how much you appreciate the option.
The Appropriate-Hospital Controversy

The literature documents thousands on thousands of VBACs with almost uniformly good outcomes, but most of these labors took place in hospitals in which obstetricians, anesthesiologists, and operating room nurses were immediately available." In some settings, it may not be possible to perform a "crash" cesarean within 10-15 minutes of the onset of an ominous fetal monitor pattern.

It is tempting for those of us who practice in large medical centers to conclude that hospitals without round-the-clock in-house cesarean teams are not appropriate for VBAC. However, that logic also would lead to the conclusion that such hospitals are not equipped to handle any obstetric cases. Sudden obstetric emergencies such as placental abruption, cord prolapse, and unexplained severe FHR decelerations can occur in parturients with no previous cesarean, and the incidence of each of these complications is similar to the incidence of uterine rupture.

Therefore, although it may be reasonable to refer VBAC patients to centers with immediate cesarean capabilities, it does not seem logical to mandate such referrals. This is especially true in rural areas where a patient might opt for home birth if her only alternative involved extensive travel to an urban medical center. This also raises the question of whether it is appropriate to single out VBAC patients to sign a document acknowledging that it might not be possible to perform a cesarean quickly enough to prevent fetal brain damage.

Should all women at hospitals without full-time in-house cesarean teams be given this same informed consent and be offered the opportunity to seek obstetric care elsewhere? A more reasonable approach would be to strive to improve response times for emergency cesarean operations at all hospitals. This will not be an easy task in some settings, but there are few more worthy goals.