

Selective Interval Delivery

Today's blessing is to live in the day and age of Selective Interval Delivery

After several years of undergoing infertility treatments, getting pregnant was one of the highlights of my life says Kellie Eibling first time mom of twins. The first trimester went pretty uneventful except for some light spotting on occasion, but the news was always reassuring from the obstetrician that the babies were doing fine.

August 28, 1996, at a scheduled 19 week ultrasound was the first indication that the road that lie ahead was going to be a long and arduous journey, that would take a team effort for Philip and Kellie Eibling, and a team of specialists if the babies were to be born viable and hopefully healthy. Baby B, the highest up in Kellie's uterus was already showing signs of distress. His gestational age was calculated to be 17 5/7 weeks, a full two weeks behind that of his brother baby A, which was calculated to be 19 5/7 weeks. It was also ascertained that he had a two vessel umbilical cord instead of the usual three vessel, so the appropriate amount of nutrients weren't reaching his system. His estimated weight was 213 grams, far behind that of his brother who's estimated weight was 348 grams. The positive data was that the amniotic fluid volume in Baby B still looked good. With the results of this recent ultrasound it was recommended that Kellie consult with a perinatologist who specialized in high risk pregnancies, and another ultrasound as well as an amniocentesis was performed to check for any chromosomal abnormalities. The ultrasound results performed at 22 4/7 weeks still showed baby B two weeks behind and baby A growing on schedule. The next turning point was October 18, at 26 5/7 weeks when Kellie was experiencing some preterm labor, unbeknownst to her and was hospitalized as the situation worsened for a tiny, baby B. The amniotic fluid was extremely low and growth had slowed even further. Kellie was given corticosteroids to help enhance the production of surfactant in hopes that the babies lungs would be more mature upon delivery. Once in the hospital Kellie's routine consisted of pool therapy, television, books, and what seemed an endless wait and see game for both Kellie and Philip, though their hope and commitment to the pregnancy never dimmed.

Kellie's perinatologist's knew that delivery of the entire pregnancy for the sake of a failing baby B would also jeopardize the health of a normal, well growing baby A. On the other hand if they didn't act fast, they would lose baby B soon. After careful consideration, and much thought about the well being of both boys, Kellie's doctor's described a delayed interval delivery, where one baby is delivered early so the other one can remain in the uterus and continue to grow stronger. There was only difference in this attempted delivery and the other documented cases of delayed interval deliveries. It would be a first in the nation that would be performed by caesarean section due to the location of the failing baby. The other documented cases of delayed interval deliveries were delivered vaginally. The decision to deliver baby B early was not a difficult one, for the Eibling's were dauntless in their struggle for the well being of each of their unborn children and very trusting of the capability and skill of Kellie's physicians. Albeit they knew they could lose baby B at any time, they also knew they needed to take it just one day at a time, and that the babies fate was at this point out of their control.

Fortunately, Kellie was able to stay in the hospital for the next two weeks undergoing pool therapy, and monitoring heart rates on both babies, trying to give them a little extra growing time in the womb. Finally, at 28 3/7 gestation the time of delivery arrived, with no growth seen in baby B, an estimated fetal weight of 650 grams that had persisted over the last two weeks, and poor fetal heart rate monitoring, the decision was made to deliver baby B the following afternoon, October 31, 1996. Upon delivery baby B weighed 619 grams or just 1 pound 6 ounces. One caesarean section down, one more to go. Now that baby B was born, and would have a better chance for survival in the intensive care nursery, baby A had plenty of nutrients and growing room if only Kellie's uterus could hold out another few weeks. After intensive monitoring of baby A in the hospital over the next ten days, Kellie was discharged home on total bed rest. All went well until the morning of November 23, when upon waking Kellie felt some cramping and within the hour she could hardly walk. Kellie was rushed to the hospital and an ultrasound revealed that baby A's shoulder and umbilical cord had torn through his amniotic sac and ruptured Kellie's

uterus, which required immediate surgery. Baby A was born minutes later via caesarean section weighing 1,738 grams or 3 pounds 13 ounces, and seemed to be doing well despite his traumatic arrival into the world. Baby B spent 97 days in the hospital while his brother was there 30 days. The Eibling's couldn't have found more appropriate names for their boys. Baby A they named Andrew which means "strong and manly". Baby B was very fittingly named Jonathan meaning "god's gift". Now that the babies are approaching 2 years Kellie feels like she has lost a full year and feels like life is just now beginning to feel normal. Jonathan is still taking light oxygen and has a feeding tube, but is now taking tastes of ice cream and pudding. He started walking this past July and is only developmentally delayed 6 months. The problems that the boys have endured the last 2 years they will outgrow, and hopefully have no permanent long term effects. The Eibling's look to their precious boys as a true blessing in their lives!

Clinical Indications for Delayed Interval Delivery

A pregnancy with multiples is considered high risk, and therefore may experience many more complications than that of a singleton pregnancy. It is therefore important to select a physician who is in tune to the high risk nature and monitoring of a twin or triplet pregnancy. Routine ultrasound monitoring should be a standard of care when pregnant with multiples in order to monitor the growth of the babies, amniotic fluid volume, placentation (site and health status of the placentas), and cervical length to name a few. Occasionally, in some multifetal pregnancies the repeated observation of poor or no growth, decreasing amniotic fluid volume, and poor blood flow through the umbilical blood vessels in one of the babies, as seen via Doppler flow on ultrasound can all indicate that the babies health is in great decline, and may even die if delivery is not attempted. If the declining baby is baby A which would be closest to the cervix, then an attempted vaginal delivery would be the preferred choice for delivery. If the declining baby is baby B then a caesarean section would be chosen for delivery, all in hopes of stopping contractions preventing infection and keeping the remaining baby (ies) in utero for optimum growth and health.

The delivery of the entire pregnancy on behalf of the baby in jeopardy would expose both or all babies to the high morbidity and mortality rates associated with extremely preterm birth. Hospital and related charges can also be positively influenced as seen by a decrease in neonatal intensive care cost, as one or more of the babies is able to increase gestational time in utero.

Certainly, as multifetal pregnancies increase, (due primarily to the use of assisted reproductive treatments) there will undoubtedly be a rise in the unexpected birth of one or more siblings at extremely premature or pre-viable states. It is a blessing to live in the day and age that selective interval delivery can be an option for these exceptional couples faced with such extreme circumstances.