Delivering your placenta and the 3rd stage of labour

In medical terms, the 'third stage of labour' (or simply 'third stage') describes the time from the birth of the baby until the placenta is delivered.

However, third stage is much more than just a medical event. It represents the time just after your baby has been born, when your body stops being pregnant and you become a mother. Your baby begins to adjust to life in the outside world. Your pituitary gland releases the hormone oxytocin which causes your uterus to contract and expel the placenta. This process is best facilitated by an environment that is quiet and peaceful, and in response to being close to your baby (especially when there is skin-to-skin contact). Oxytocin release is further stimulated by breastfeeding.

Why do I need to think about the third stage while I am pregnant?

The third stage, and shortly after, is when the potential for bleeding is the highest. In the third world, postpartum hemorrhage (PPH) is still the leading cause of death for women of childbearing age. Of course, in Canada where we are better nourished and have access to emergency medications, this is rarely true. But PPH can still have serious consequences, including the need for further medical intervention.

- Short term consequences of PPH
- Administration of emergency drugs
- IV fluids
- Manual removal of the placenta
- Blood transfusion
- Increased hospital stay
- In extreme cases, hysterectomy
- Longer term consequences of PPH

The major cost of PPH is anemia. It is normal for new mothers to be tired, but to be anemic as well can make coping exceptionally difficult. The complications of being anemic postpartum include:

- Interference with bonding due to extreme exhaustion
- Decreased milk production as the body's resources go into producing blood cells
- Constipation from taking iron supplements
- Increased susceptibility to infection
- For susceptible women, precipitating a slide into postpartum depression

Are there risk factors that increase the chance of PPH?

History

- Previous PPH
- Previous retained placenta
- Pregnancy complications
- High blood pressure

Medical factors

- Clotting disorder
- Uterine fibroids

Anything that especially stretches the uterus

- Large baby (>4kgs or 9lbs)
- Polyhydramnios (extreme amount of amniotic fluid)
- Twins

Labour factors

- Precipitous birth (<3hrs)
- Prolonged labor
- Prolonged pushing stage
- Prolonged third stage (>30 minutes)
- Full bladder
- Uterine infection
- Induction/Augmentation
- Shoulder dystocia

Mode of delivery

- Forceps/vacuum
- Cesarean section

Are there any ways to minimize the chance of PPH?

There is no doubt that the use of uterotonic (causing uterine contraction) drugs has saved many lives which would have been lost to PPH throughout the world. Delivering the placenta as quickly as possible has also been shown to decrease the chance of PPH. This can usually be done by using careful traction on the umbilical cord to ease the placenta out. Once the placenta is out, promoting efficient contraction of the uterus will minimize bleeding. This can be promoted by massaging or rubbing the uterus from on top of your abdomen.

The combination of 1) uterotonic drugs, 2) controlled cord traction, and 3) uterine massage, is called Active Management of Third Stage. Active Management to prevent PPH has become the standard of care in many places.

Does this mean the cord will be cut right away?

Immediate clamping of the umbilical cord used to be part of Active Management but has not been shown to be effective in minimizing blood loss. Because of this, and because there are other useful reasons to not clamp the cord immediately, your baby's cord will be left intact until it has stopped pulsing UNLESS the baby needs to be resuscitated and this cannot be done with the cord intact OR you are actively hemorrhaging and emergency measures are hampered by having the baby still attached.

Are there any alternatives to Active Management?

The alternative to Active Management is to let the third stage happen naturally, which is called Physiological Management. Mainly this means you will not be given a shot of prophylactic oxytocin. Your body will be supported in delivering your placenta as efficiently as possible. For example, nipple stimulation (such as with breastfeeding) which causes natural oxytocin production can be used if the placenta is slow in coming.

Considerations in third stage management

Active Management

- Less pain from the oxytocin injection when given at the moment of birth: You likely won't even know you had it, unlike if given a few minutes later when you will very much feel this uncomfortable injection.
- Labour is completed more quickly
- Lower chance of needing emergency drugs to control bleeding, some of which can cause negative side effects such as nausea, vomiting, diarrhea or high blood pressure.
- If you do not accept blood products, active management will lower your chance of needing a blood transfusion
- If you are planning a home birth, active management will lower your chance of needing to transport to hospital due to blood loss
- If you are anemic prenatally, even minimal blood loss will affect you

Physiological Management

- Less likely to experience the most common side effect of oxytocin which is uterine cramping. This is less common with first-time moms.
- There are some risks with controlled cord traction such as snapping of the cord making it more difficult to deliver the placenta quickly, the risk of pulling out an incompletely separated placenta, and the very small risk of causing the uterus to invert which will require immediate action to reverse.
- There can be a risk if there is an undiagnosed twin (although this is rare due to the extensive use of ultrasound scans in pregnancy).
- If you develop risk factors in labor, it's not too late to choose to have Active Management. In fact, your care provider is likely to recommend this.
- If after some time your placenta fails to separate, or you are bleeding significantly, you should prepared for your care providers to act quickly in recommending or giving emergency drugs.