Labor and delivery

LABOR AND DELIVERY

BLOODY SHOW

* Discharge increases late in pregnancy, and sometimes mucous is mixed with blood. The show may happen as contractions start or may happen many days earlier as the cervix starts to thin. You do not need to call about this and this is not necessarily an indicator of labor starting. However, if you are bleeding like a period, please call.

LATENT LABOR/BRAXTON-HICKS CONTRACTIONS

(also called early labor and false labor)

* Contractions are irregular and not progressively closer together. Walking, changing activity or positions may relieve or stop the contractions. They may be painful or may not be.
* There is no change in cervix.
* You do not need to call about this.

ACTIVE LABOR

* Contractions get stronger, occur more frequently and last longer. They are painful.
* Walking, changing activity or position doesn't affect intensity or frequency of contractions.
* Cervix dilates.

Please call if you think you are in active labor.

Labor with the first baby varies with different patients, but on average lasts 12-14 hours. After the first baby, labor averages 5-6 hours.

CONTRACTIONS OF LABOR

- occur at regular intervals
- increase in frequency as time passes (intervals between them shorten)
- increase in length as time passes
- are not stopped by change in position or relaxation
- cause discomfort in back and lower abdomen with pelvic pressure
- become stronger and more intense as time passes
- cause the cervix to dilate

BRAXTON-HICKS CONTRACTIONS

- are irregular and erratic
- occur at intervals that do not become shorter as time passes
- do not increase in duration as time passes
- usually can be relieved by change in position or relaxation
- cause discomfort mainly in lower abdomen, typically without pelvic pressure or backache
- do not cause the cervix to dilate

IF YOUR WATER BREAKS

* Please call. We will send you to the hospital to be checked as we cannot necessarily tell over the phone if this has occurred. You have to be examined. You may or may not enter labor after your water breaks, but we do need you to call when it happens and be evaluated.

WHEN TO CALL/GO TO THE HOSPITAL

* If this is your first pregnancy, wait until your contractions have been five minutes apart for an hour and are hurting. Labor lasts an average of 12 hours. If this is not your first pregnancy, you may be in labor with fewer contractions. If you have questions about your contractions, please call. If your provider has given you different instructions (unique to your situation) please follow those. Call if your water breaks, you have vaginal

bleeding, or decreased fetal movement. Please call before going to the hospital. We will then call the hospital to let them know you are coming and why. Call our office number 24/7 and a nurse or provider will call you back.

PAIN RELIEF OPTIONS

* Natural - no use of medications during labor. Used in conjunction with relaxation and breathing techniques.
* Epidural - anesthetic injected through a catheter in the lower back producing numbness of the lower abdomen, legs, and birth canal.
* Nitrous oxide - also known as laughing gas this medication is breathed in through a mask.
* IV Narcotics - pain medications that are given through your IV.

VAGINAL BIRTH

The first stage of labor starts with the onset of active labor and is completed when the cervix is completely dilated to 10 centimeters. The first stage of labor can take quite a long time, especially with a first baby. This stage of labor could last twelve to fourteen hours or more.

The second stage of labor starts with the cervix becoming fully dilated and is completed with the delivery of the infant. The second stage of labor is usually much shorter than the first stage. The contractions are now very close together and the baby is being pushed out. This stage can last from a few minutes to many hours.

The third stage of labor begins after the delivery of the infant and is completed with the delivery of the placenta or afterbirth – that material which was developed to create the baby's incubator inside of you. This stage generally lasts only a few minutes and minimal pushing is needed.

CESAREAN BIRTH (C-SECTION)

Cesarean birth involves removal of the baby through the mother's abdomen. There are numerous reasons for cesarean deliveries. Some are known prior to labor, but many aren't identified until after labor begins and progresses. Any one or a combination of the following conditions can lead to a cesarean birth.

- **Abnormal Presentations -** The baby's position prevents a normal head-first delivery. The passage of a baby's legs or buttocks (breech birth), or arm or side (transverse-lie birth) first through the birth canal creates a great risk to the baby's well being.
- **Cephalopelvic Disproportion -** The baby's head or body is too large to pass through the birth canal. This may be identified by a cervix that stops dilating or a baby that doesn't come down with you pushing.
- **Fetal Distress -** The baby's heartbeat may appear abnormal during labor, indicating possible trouble for the baby.
- **Maternal Bleeding -** The placenta can separate from the uterus prematurely and disturb the oxygen supply to the baby. Additionally, the placenta can be positioned over the cervix and prevent passage of the baby.
- **Maternal Medical Condition -** Toxemia, genital herpes, diabetes, heart disease and certain other medical conditions in the mother can lead to a cesarean birth in some situations.
- **Previous Cesarean Birth -** The previous scar in the uterus may be weak and allow rupture of the uterus during labor.
- **Prolapsed Cord -** The baby's umbilical cord drops into the vagina ahead of the baby and can endanger him or her by cutting off its oxygen supply.

VAGINAL BIRTH AFTER CESAREAN (VBAC)

Certain women opt to try to deliver vaginally after a previous cesarean birth. This option is not for everyone, but can be accomplished in more than 60% of the instances where it is attempted.

The advantages of a vaginal birth after cesarean are a less costly and shorter hospital stay. It also allows for a quicker recovery and resumption of normal activities. Please talk to your provider to discuss your options.

CORD BLOOD COLLECTION

Umbilical cord blood can be collected from the umbilical cord immediately after your baby is born by either vaginal delivery or cesarean section. Generally, it is very easy for your doctor to collect and poses no risk to mom or baby. If it is not collected, it is discarded with the placenta. Umbilical cord blood is one of three sources of cells used in transplants; the other two are bone marrow and circulating peripheral blood. The predominant disadvantage of umbilical cord blood in general, is the low number of stem cells per unit – sometimes not enough for a transplant. Umbilical cord blood cells are not the same as embryonic stem cells.

It is estimated that over 7000 cord blood transplants have been performed since 1988 when the first successful umbilical cord blood transplant occurred. Transplants have been done to correct inborn errors of metabolism, blood/bone marrow cancers, and genetic disorders of the blood and immune system. You may read about many other uses but these can only be considered "experimental" or "investigational" for now. There are two types of transplants:

1. autologous (taken from an individual for subsequent use by the same individual)
2. allogenic (transplant to a related or unrelated person).

Nationally, there are ***public*** ("donated" cord blood to anyone) and ***private*** (store for yourself or your family only) banks for the collection and storage of cord blood. Unfortunately, currently, no ***public*** bank exists in Minnesota. One organization, Cryobanks International, does accept limited donations from women in the continental U.S. Call 1-800-869-8608 or visit their website www.cryo-intl.com/enroll/donating to find out their eligibility requirements and process.

The utility of long-term ***private*** bank storage has been questioned. There are three companies who do the bulk of private banking: Cord Blood Registry (CBR), Viacord and Cryo-Cell. There is no accurate estimate of the likelihood of using a stored sample. One estimate is approximately 1 in 2700 stored units would be used for an individual or family member. Others argue that the rate is even lower. In addition to a low chance of using a stored unit, a predominant disadvantage of private umbilical cord blood storage is the cost. This disadvantage may be exacerbated given that there could possibly not be enough stem cells to transplant. In addition, autologous transplants cannot be used to correct genetic or inborn errors of metabolism or childhood leukemia because the genetic mutation present in the child would also be present in the cord blood stem cells. The advantage of private banking is if a sibling child is known to have a disease that can possibly be treated with a stem cell transplant from the umbilical cord blood of a new sibling baby.

Given the significant cost of private banking, we encourage you to research this option thoroughly and consider the frequency of use of the cord blood prior to enrolling with a company. There is also a fee from your doctor for the cord blood collection so you should find out if your insurance covers that cost. During delivery of your baby, unforeseen medical issues may arise that preclude or limit your doctor's ability to collect cord blood. Because of this we do not guarantee that cord blood can always be collected or that the quantity of cord blood collected will be adequate. The providers at John A Haugen have not done extensive research on any of these companies in terms of safety, ethics, etc. and we do not endorse the use of any of them specifically.

Above information from
American College of Obstetrics and Gynecology Committee Opinion. Number 399. February 2008.
National Marrow Donor Program

Additional information:
www.marrow.org - National Marrow Donor Program
www.aap.org - American Academy of Pediatrics
www.viacord.com
www.cryo-cell.com
parentsguidecordblood.org
www.aabb.org - formerly the American Association of Blood Banks
www.cordblood.com (CBR)