Women's
BC WOMEN'S HOSPITAL
& HEALTH CENTRE
An agency of the Provincial
Health Services Authority

Information about Intravenous Fentanyl

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What is Fentanyl?

It is a drug that is a powerful pain reliever. It is a narcotic like morphine. It is offered to help decrease labor pain. Some women say it takes the edge off the pain and helps them to cope better. It will take most of the pain away but not all of it. Doses that would take away all your labor pain would make you very sleepy, drop your blood pressure and would decrease your ability to breathe. This could be dangerous for you and your baby.

How is it given?

It is given to you in a way so it is safe for you and your baby.

- First your nurse puts a small tube in your hand or arm called an intravenous or IV.
- There are two ways it can be given. Your nurse, doctor, or midwife can give you the fentanyl through the IV tube. The other way is you can give yourself this drug through the IV by using a pump which allows you to control the number of fentanyl doses each hour. It is called a patient-controlled pump. If you are using a pump you cannot give yourself too much of the fentanyl because the pump is set to only allow safe doses over a set time interval.

Side effects of Fentanyl

- You may become sleepy and relaxed.
- Your breathing may slow down. Some women need to be given some oxygen and be watched closely if this happens.
- You may feel sick to your stomach. This happens less often with fentanyl than with other narcotics.
- You may feel itchy.

Side effects cont'd...

- Fentanyl crosses the placenta and goes to your baby. Your baby may be sleepy and not breathe well at birth or have a lower heart rate. If this happens, your baby may be given a drug that reverses the slowed breathing called Naloxone. Sometimes, if you have needed a large dose of fentanyl, your baby's breathing may have to be watched closely for several hours.
- Your baby may have some trouble starting breast feeding because she or he is sleepy. You may need more help to get your baby to breast feed. Your nurse and/or lactation consultant will be able to help you with breastfeeding.

What does it not do?

- Fentanyl will not take all your pain away.
- Fentanyl does not give enough pain relief so your doctor or midwife can help your baby being delivered by the use of forceps or vacuum.
- If your labor is very long or difficult it may not be as effective for pain relief later on. You may need a different form of pain relief such as an epidural. An epidural gives long lasting relief for the entire labour.

If you have questions, please ask.

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Caesarean Section

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Topic Overview

Is this topic for you?

If you have had a C-section and would like information about how a caesarean affects future deliveries, see the topic Vaginal Birth After Caesarean (VBAC).

What is a caesarean section?

A caesarean section is the delivery of a baby through a cut (incision) in the mother's belly and uterus. It is often called a C-section. In most cases, a woman can be awake during the birth and be with her newborn soon afterward. See a picture of a delivery by C-section (See figure 1 in appendix).

If you are pregnant, chances are good that you will be able to deliver your baby through the birth canal (vaginal birth). But there are cases when a C-section is needed for the safety of the mother or baby. So even if you plan on a vaginal birth, it's a good idea to learn about C-section, in case the unexpected happens.

When is a C-section needed?

A C-section may be planned or unplanned. In most cases, doctors do caesarean sections because of problems that arise during labour. Reasons you might need an unplanned C-section include:

- Labour is slow and hard or stops completely.
- The baby shows signs of distress, such as a very fast or slow heart rate.
- A problem with the placenta or umbilical cord puts the baby at risk.
- The baby is too big to be delivered vaginally.

When doctors know about a problem ahead of time, they may schedule a C-section. Reasons you might have a planned C-section include:

- The baby is not in a head-down position close to your due date.
- You have a problem such as heart disease that could be made worse by the stress of labour.
- You have an infection that you could pass to the baby during a vaginal birth.
- You are carrying more than one baby (multiple pregnancy).
- You had a C-section before, and you have the same problems this time or your doctor thinks labour might cause your scar to tear (uterine rupture).

In some cases, a woman who had a C-section in the past may be able to deliver her next baby through the birth canal. This is called vaginal birth after caesarean (VBAC). If you have had a previous C-section, ask your doctor if VBAC might be an option this time.

In the past 40 years, the rate of caesarean deliveries has jumped from about 1 out of 20 births to about 1 out of 4 births.[1] This trend has caused experts to worry that C-section is being done more often than it is needed. Because of the risks, experts feel that C-section should only be done for medical reasons.

What are the risks of C-section?

Most mothers and babies do well after C-section. But it is major surgery, so it carries more risk than a normal vaginal delivery. Some possible risks of C-section include:

- Infection of the incision or the uterus.
- Heavy blood loss.
- Blood clots in the mother's legs or lungs.
- Injury to the mother or baby.
- Problems from the anesthesia, such as nausea, vomiting, and severe headache.
- Breathing problems in the baby if it was delivered before its due date.

If she gets pregnant again, a woman with a C-section scar has a small risk of the scar tearing open during labour (uterine rupture). She also has a slightly higher risk of a problem with the placenta, such as placenta previa.

How is a C-section done?

Before a C-section, a needle called an IV is put in one of the mother's veins to give fluids and medicine (if needed) during the surgery. She will then get medicine (either epidural or spinal anesthesia) to numb her belly and legs. Fast-acting general anesthesia, which makes the mother sleep during the surgery, is only used in an emergency.

Once the anesthesia is working, the doctor makes the incision. Usually it is made low across the belly, just above the pubic hair line. This may be called a "bikini cut." Sometimes the incision is made from the navel down to the pubic area. See a picture of C-section incisions (See figure 2 in appendix). After lifting the baby out, the doctor removes the placenta and closes the incision with stitches.

How long does it take to recover from a C-section?

Most women go home 3 to 5 days after a C-section, but it may take 4 weeks or longer to fully recover. By contrast, women who deliver vaginally usually go home in a day or two and are back to their normal activities in 1 to 2 weeks.

Before you go home, a nurse will tell you how to care for the incision, what to expect during recovery, and when to call the doctor. In general, if you have a C-section:

- You will need to take it easy while the incision heals. Avoid heavy lifting, intense exercise, and sit-ups. Ask family members or friends for help with housework, cooking, and shopping.
- You will have pain in your lower belly and may need pain medicine for 1 to 2 weeks.
- You can expect some vaginal bleeding for several weeks. (Use sanitary pads, not tampons.)

Call your doctor if you have any problems or signs of infection, such as a fever or red streaks or pus from your incision.

Frequently Asked Questions

Learning about caesarean section:

- How is a caesarean section done?
- When is a caesarean section necessary?
- What are the risks of caesarean section?
- What is recovery after a caesarean section like?
- When should I call my doctor after a caesarean section?

Ongoing concerns:

- Should I try a VBAC trial of labour after a previous caesarean?

How a Caesarean Section Is Done

Surgery preparation

Most caesarean sections are performed with epidural or spinal anesthesia, used to numb sensation in the abdominal area. Only in an emergency situation or when an epidural or spinal anesthesia cannot be used or is a problem would fast-acting general anesthesia be used to make you unconscious for a caesarean birth.

The hospital may send you instructions on how to get ready for your surgery, or a nurse may call you with instructions before your surgery.

In preparation for a caesarean section, your arms are secured to the table for your safety, and a curtain is hung across your chest. A tiny intravenous (IV) tube is placed in your arm or hand; you may be given a sedative through the IV to help you relax. A catheter is inserted into your bladder to allow you to pass urine during and after the surgery. Your upper pubic area may be shaved, and the abdomen and pubic area are washed with an antibacterial solution. The incision site may be covered with an adhesive plastic sheet, or drape, to protect the surgical area.

Before, during, and after a caesarean section, your blood pressure, heart rate, heart rhythm, and blood oxygen level are closely monitored. You will also be given a dose of antibiotics to prevent infection after delivery.

Caesarean procedure and delivery

Once the anesthesia is working, a doctor makes the caesarean incision through your lower abdomen and uterus. See a picture of caesarean section incisions (See figure 2 in appendix). You may notice an intense feeling of pressure or pulling as the baby is delivered. After delivering your newborn through the incision, the doctor then removes the placenta and closes the uterus and incision with layers of stitches.

Right after surgery, you will be taken to a recovery area where nurses will care for and observe you. You will stay in the recovery area for 1 to 4 hours, and then you will be moved to a hospital room. In addition to any special instructions from your doctor, your nurse will explain information to help you in your recovery.

Why It Is Done

Some caesarean deliveries are planned ahead of time; others are done when a quick delivery is needed to ensure the mother's and infant's well-being.

Planned caesarean

Some caesarean sections are planned when a known medical problem would make labour dangerous for the mother or baby. Medical reasons for a planned caesarean may include:

- A fetus in any position that is not head-down (including breech position). For more information, see the topic Breech Position and Breech Birth.
- Decreased blood supply to the placenta before birth, which may lead to a small baby.
- Estimated fetal size of over 4 kg (9 lb) to 4.5 kg (10 lb) or more.
- A maternal disease or condition that may be made worse by the stress of labour, such as heart disease.
- A known health problem with the baby, such as spina bifida.
- A placenta that is blocking the cervix (placenta previa). For more information, see the topic Placenta Previa.
- Open sores from active genital herpes near the due date, which can be passed to the fetus during vaginal delivery.
- Infection with human immunodeficiency virus (HIV), which can be passed to the fetus during vaginal delivery.[2]
- Multiple pregnancy. The direction and size of the incision depends on the position of the fetuses. In particular, caesarean delivery may be needed for multiple births involving:
    - Twins that share one amniotic sac (monoamniotic twins), because of the risk that the cords will get tangled.
    - Three fetuses or more.
    - Conjoined (Siamese) twins.
    - An overstretched uterus that cannot contract adequately during labour (uterine inertia), making labour prolonged and difficult.
    - Poorly positioned or large fetuses.

Many caesarean deliveries are planned ahead of time for women who have had a caesarean in the past. Medical reasons for a planned repeat caesarean may include:

- A current problem that has led to difficult labour and caesarean before, such as a narrow pelvis and a large fetus (cephalopelvic disproportion).
- Factors that increase the risk of uterine rupture during labour, such as having a vertical scar, triplets or more, or a very large fetus thought to weigh 4 kg (9 lb) to 4.5 kg (10 lb) or more. For more information, see the topic Vaginal Birth After Caesarean (VBAC).
- No access to constant medical supervision by a caesarean-trained doctor during active labour, or no available facilities for an emergency caesarean.

Pregnancy: Should I try VBAC after a past C-section?

Emergency caesarean

Some caesarean sections are done without planning, after labour has started. Medical reasons for an emergency caesarean may include:

- Fetal distress (suggested by a very rapid or very slow heart rate)
- Abruptio placenta, which can cause excessive bleeding (hemorrhage) and decreased oxygen supply to the fetus. For more information, see the topic Abruptio Placenta.
- Umbilical cord problems that decrease or cut off fetal blood supply, as when the cord has slipped into the birth canal ahead of the fetus, and the fetus moves into the birth canal and presses against the cord (cord prolapse).

Other reasons you might need a caesarean

- Difficult, slow labour (dystocia)
- Labour that has stopped completely (failure to progress)
- Cephalopelvic disproportion, a combination of the fetus having a large head and the mother having a narrow pelvic structure. This condition is often linked to failure to progress or dystocia.

Risks and Complications

Caesarean section is considered relatively safe. It does, however, pose a higher risk of some complications than does a vaginal delivery. If you have a caesarean section, expect a longer recovery time than you would have after a vaginal delivery.

After caesarean section, the most common complications for the mother are:

- Infection.
- Heavy blood loss.
- A blood clot in the legs or lungs.
- Nausea, vomiting, and severe headache after the delivery (related to anesthesia and the abdominal procedure).
- Bowel problems, such as constipation or when the intestines stop moving waste material normally (ileus).
- Maternal death (very rare). The risk of death for women who have a planned caesarean delivery is very low (about 6 in 100,000). For emergency caesarean deliveries, the rate is higher, though still very rare (about 18 in 100,000).[1]

Caesarean risks for the infant include:

- Injury during the delivery.
- Need for special care in the neonatal intensive care unit (NICU).[3]
- Immature lungs and breathing problems, if the due date has been miscalculated or the infant is delivered before 39 weeks of gestation. [3, 4]

While most women recover from both caesarean and vaginal births without complications, it takes more time and special care to heal from caesarean section, which is a major surgery. Women who have a caesarean section without complications spend about 3 days in the hospital, compared with about 2 days for women who deliver vaginally. Full recovery after a caesarean delivery takes 4 to 6 weeks; full recovery after a vaginal delivery takes about 1 to 2 weeks.

Long-term risks of caesarean section

Women who have a uterine caesarean scar have slightly higher long-term risks. These risks, which increase with each additional caesarean delivery, include:[5]

- Breaking open of the incision scar during a later pregnancy or labour (uterine rupture). For more information, see the topic Vaginal Birth After Caesarean (VBAC).
- Placenta previa, the growth of the placenta low in the uterus, blocking the cervix.
- Placenta accreta, placenta increta, placenta percreta (least to most severe). These problems occur when the placenta grows deeper into the uterine wall than normal, which can lead to severe bleeding after childbirth, and sometimes may require a hysterectomy.

What to Expect After C-Section

After a routine caesarean section, expect to be monitored closely for the next 24 hours to make sure that you don't develop any problems. You will receive pain medicine and will likely be encouraged to begin walking short distances within 24 hours of surgery. Walking can help relieve gas buildup in the abdomen. It is usually very uncomfortable to begin walking, but the pain will decrease in the days after the delivery.

The typical hospital stay after a caesarean delivery is about 3 days. You can feed and care for your newborn as you feel able. Before going home, you'll receive post-surgery instructions, including warning signs of complications. It can take 4 weeks or more for a caesarean incision to heal, and it isn't unusual to have occasional pains in the area during the first year after the surgery.

It is important to take care of yourself at home while you are healing.

Activity

- Rest when you feel tired. Getting enough sleep will help you recover.
- Try to walk each day. Start by walking a little more than you did the day before. Bit by bit, increase the amount you walk. Walking boosts blood flow and helps prevent pneumonia, constipation, and blood clots.
- Avoid strenuous activities, such as bicycle riding, jogging, weightlifting, and aerobic exercise, for 6 weeks or until your doctor says it is okay.
- Until your doctor says it is okay, do not lift anything heavier than your baby.
- Do not do sit-ups or other exercises that strain the belly muscles for 6 weeks or until your doctor says it is okay.
- Hold a pillow over your incision when you cough or take deep breaths. This will support your belly and decrease your pain.
- You may shower as usual. Pat the incision dry when you are done.
- You will have some vaginal bleeding. Wear sanitary pads. Do not douche or use tampons until your doctor says it is okay.
- Ask your doctor when you can drive again.
- You will probably need to take at least 6 weeks off work. It depends on the type of work you do and how you feel.
- Ask your doctor when it is okay for you to have sex.

Diet

- You can eat your normal diet. If your stomach is upset, try bland, low-fat foods like plain rice, broiled chicken, toast, and yogourt.
- Drink plenty of fluids (unless your doctor tells you not to).
- You may notice that your bowel movements are not regular right after your surgery. This is common. Try to avoid constipation and straining with bowel movements. You may want to take a fibre supplement every day. If you have not had a bowel movement after a couple of days, ask your doctor about taking a mild laxative.

Incision care

- If you have strips of tape on the incision, leave the tape on for a week or until it falls off.
- Wash the area daily with warm, soapy water, and pat it dry. Other cleaning products, such as hydrogen peroxide, can make the wound heal more slowly. You may cover the area with a gauze bandage if it weeps or rubs against clothing. Change the bandage every day.
- Keep the area clean and dry.

For information about how a caesarean affects future deliveries, see the topic Vaginal Birth After Caesarean (VBAC).

When to call a doctor

Call 911 anytime you think you may need emergency care. For example, call if:

- You passed out (lost consciousness).
- You have severe trouble breathing.

- You have sudden chest pain and shortness of breath, or you cough up blood.
- You have severe pain in your belly.

Call your doctor now or seek immediate medical care if:

- You have bright red vaginal bleeding that soaks one or more pads each hour for 2 or more hours.
- Your vaginal bleeding seems to be getting heavier or is still bright red 4 days after delivery.
- You pass blood clots larger than the size of a golf ball.
- You have vaginal discharge that smells bad.
- You are sick to your stomach or cannot keep fluids down.
- You have loose stitches, or your incision comes open.
- Your belly feels tender, or full and hard.
- You have signs of infection, such as:
    - Increased pain, swelling, warmth, or redness.
    - Red streaks leading from the incision.
    - Pus draining from the incision.
    - Swollen lymph nodes in your neck, armpits, or groin
    - A fever.
- You have signs of a blood clot, such as:
    - Pain in your calf, back of the knee, thigh, or groin.
    - Redness and swelling in your leg or groin.
- You have trouble passing urine or stool, especially if you have pain or swelling in your lower belly.
- You feel sad, tearful, or hopeless for more than a few days, or you have troubling or dangerous thoughts.

Some women feel shoulder pain for days after a caesarean section. This is referred pain, caused by trauma to the abdominal muscles during the delivery. It goes away on its own during recovery.

What to Think About

If you plan to deliver vaginally and have concerns about having an unnecessary caesarean delivery, talk to your doctor or midwife ahead of time. Ask in what types of situations caesarean section is usually used and what steps he or she takes to promote a vaginal birth.

Public health experts have urged the North American obstetric community to reduce the percentage of deliveries done by caesarean, identifying birth scenarios that may not necessarily require surgical delivery. These include:

- History of caesarean. Some women with a caesarean scar can deliver vaginally, although there are risks involved in a VBAC delivery. Some

smaller hospitals no longer provide VBAC, reflecting a trend toward greater medical caution with VBAC. If you have had a previous caesarean, weigh the benefits and risks of vaginal delivery with your doctor or midwife. For more information, see the topic Vaginal Birth After Caesarean (VBAC).

- Fetal distress. Deciding whether and when a fetus with a slowing heart rate should be delivered by caesarean is a common judgment call during labour. Ultimately, a health professional will lean toward caution and deliver by caesarean to prevent harm to a newborn.
- Difficult, slow labour (dystocia). Dystocia can often be corrected with medicine that restarts contractions (augmentation). For women with a caesarean scar, oxytocin must be used carefully to reduce the slight risk of the scar rupturing during labour.

Some doctors are more likely to see a need for a caesarean than others. For example, what one doctor considers a slow labour may be a normal labour to another. But all doctors are guided by the common goal of a healthy labour and delivery for both the mother and her newborn.

References

Citations

1. Cunningham FG, et al. (2005). Cesarean delivery and peripartum hysterectomy. In Williams Obstetrics, 22nd ed., pp. 587–606. New York: McGraw-Hill.
2. American College of Obstetricians and Gynecologists (2000; reaffirmed 2008). Scheduled cesarean delivery and the prevention of vertical transmission of HIV infection. ACOG Committee Opinion No. 234. Washington, DC: American College of Obstetricians and Gynecologists.
3. Kolås T, et al. (2006). Planned cesarean versus planned vaginal delivery at term: Comparison of newborn infant outcomes. American Journal of Obstetrics and Gynecology, 195(6): 1538–43.
4. Tita ATN, et al. (2009). Timing of elective repeat cesarean delivery at term and neonatal outcomes. New England Journal of Medicine, 360(2): 111–120.
5. Scott JR, Porter TF (2008). Cesarean delivery. In RS Gibbs et al., eds., Danforth's Obstetrics and Gynecology, 10th ed., pp. 491–503. Philadelphia: Lippincott Williams and Wilkins.

Other Works Consulted

- Thorpe JM Jr (2009). Clinical aspects of normal and abnormal labor. In RK Creasy et al., eds., Creasy and Resnik's Maternal Fetal Medicine, 6th ed., pp. 706–724. Philadelphia: Saunders Elsevier.

Credits for Caesarean Section

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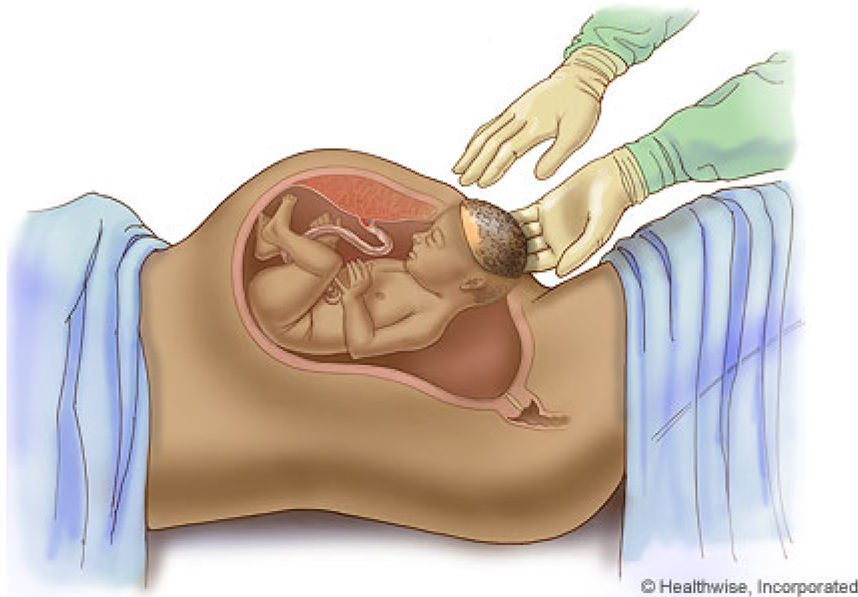
Last Revised	April 15, 2010

Appendix

Topic Images

Figure 1

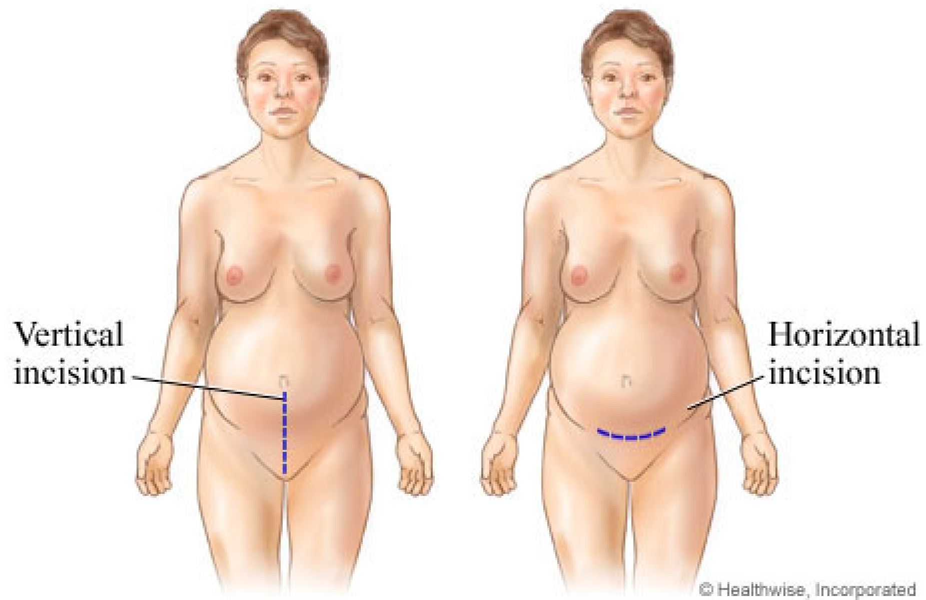
Caesarean Delivery



A caesarean section (C-section) is the delivery of a baby through an incision in the mother's belly and uterus.

Figure 2

Caesarean section incisions



To do a caesarean section, the doctor makes an incision. Usually it is a horizontal incision, made low across the belly, just above the pubic hair line. This may be called a "bikini cut." Sometimes the incision is vertical, from the navel down to the pubic area.

Ideas for the Best Cesarean Possible

By Penny Simkin

If you have learned that you must have a cesarean (a "planned cesarean") for your safety or the baby's, you may feel disappointed that you cannot have the birth you had hoped and planned for. Here are some ideas for tailoring the cesarean birth of your baby to make it very special and personally satisfying for you, your partner, and your baby.

Before the surgery:

- Be sure you understand and agree with the reasons for the cesarean (i.e., malposition of the baby, a medical problem for you or the baby).
- Learn about the procedure. Read about it in *Pregnancy, Childbirth and the Newborn* or the *Birth Partner* and discuss it with your caregiver.
- Learn about your anesthesia choices and how each is administered. General information is available in the books mentioned above. If possible, however, meet and discuss medications with an anesthesiologist along with any concerns you have. A spinal or epidural block is the most common type of anesthesia when a cesarean is planned in advance, but there are other possibilities. (See "Anesthesia and medication issues below).
- Learn the layout of the operating room, particularly where the baby will be taken for initial care. Will she be in the same room or an adjacent room? Will you be able to see her? Can your partner move back and forth between your side and your baby's?
- Discuss the possibility of waiting until you go into labor and then going to the hospital to have the cesarean. The advantage is that the timing for birth is more likely to be optimal for the baby. The disadvantages are that you might not know the doctor on call who will do the surgery, and that you cannot plan ahead (which is the same as with most vaginal births).
- If you do not decide to await the onset of labor, make your appointment for the surgery. If there is a choice of times, you may want to consider having the first appointment of the day for two reasons: there is less likely to be a delay (from earlier surgeries taking longer than expected); and you will not be as hungry if you do not have to wait all day. You will probably have to avoid eating from the night before.

During the surgery and repair:

- For your personal comfort, consider these ideas:
    - Have your partner put some pleasant-scented (lavender and bergamot are popular) lotion, massage oil, or cologne on your cheeks. He can also put it on his wrist for you to sniff. This is soothing and may

counteract the "hospital smells." Because some staff members may be allergic to some scents, you'd better ask if this is okay.
    - Ask if at least one arm can be left unrestrained.
    - Bring your own CD or tape of music to be played during the surgery. Music that is familiar and that you love improves the ambience. Many operating rooms have CD players.
    - Plan to use relaxation techniques and slow breathing (like sighing) during the surgery. Hold your partner's hand.
- Ask that they lower the screen when the baby is lifted from your body so that you can see the birth.
- During the repair procedure, there is one technique that some doctors do, while others believe it is unnecessary and possibly problematic. This is to lift the uterus out of the abdomen to inspect it and then replace it. This procedure may cause considerable nausea while it is being done, and later gas pains. You might wish to discuss this with your doctor beforehand. If he customarily does it, ask for the advantages.
- Ask about picture taking during the surgery or afterwards. There sometimes are policies restricting picture taking. A digital camera has the advantage of allowing pictures of the baby to be shown to you within seconds. If your baby is out of your sight, it may be possible for your partner (or a nurse) to take a picture and show it to you.
- Once your baby is born, your partner might go to the baby and talk or sing to him. A familiar voice often calms the baby at this time, and seeing the baby's response is a poignant moment for the partner. Some couples have sung a special song (i.e., "You Are My Sunshine") aloud to the baby frequently before birth. The baby seems to be soothed when hearing that song.
- The partner may be able to bring the wrapped baby back to you for your first contact. You can nuzzle, kiss and talk to your baby, but it is unlikely you will be able to hold her or breastfeed until you leave the operating room, because the operating table is narrow and you may feel quite weak.

Spinal or epidural anesthesia and other medication issues:

- The spinal block has many advantages for a planned cesarean, which make it the usual choice. It is quick to administer and to take effect. It usually involves only a single injection, and does not require a catheter in your back. It causes numbness that lasts a few hours. You remain awake and aware. It hardly affects your baby. The injection may also contain some long-acting narcotic such as morphine that provides good postpartum pain relief without grogginess for up to 24 hours after the surgery. An epidural is very similar and has these advantages, but is more complex to administer and takes longer to provide adequate pain relief. There are, however, some concerns about spinal and epidural blocks that might be frightening:

- It is not uncommon to have a period during which you feel breathless or as if you cannot breathe. It can be scary. It happens because the anesthetic may numb the nerves that let you feel your breathing, while the nerves to the muscles that make you breathe are not blocked. In other words, you are breathing, but cannot feel it.
- What to do: Say that you cannot breathe. The anesthesiologist, who is at your head, will check and reassure you. Your partner should coach you with every breath, watching closely and saying, "Take a long breath in -- yes you are doing it, and now breathe out. Good." He might hold your hand in front of your mouth so you can feel your breath, and reassure you, "You are breathing, even though you can't feel it." This feeling does not last for the entire surgery.
- On very rare occasions, the level of anesthesia rises high enough to involve the muscles of breathing, so that you really are not breathing. You cannot talk either. The anesthesiologist, who is watching the monitors closely, discovers this and takes measures to assist your breathing. You and your partner should also have a signal. If you can't breathe and can't talk, blink your eyes many times. That means, "I can't breathe!" Your partner should be watching you, and if you blink in that way, says, "I think she can't breathe!" This may alert the anesthesiologist a few seconds before he would pick up the problem.
- On other, even more rare occasions, the anesthesia is not adequate, and you feel the surgery. This is very scary. The doctors will probably want to make sure your reaction is not an anxiety reaction to the surgery, and may seem not to believe you at first. If you are feeling the surgery, tell them to stop. Your partner must help you with this. Make them give you better anesthesia before proceeding. This might mean repeating your block or giving you a general anesthetic.

- During the repair, you may feel nauseated and shaky for a period of time. These are normal reactions to major surgery and vary from feelings of queasiness to vomiting and from trembling to shaking and teeth chattering. There are medications to ease these symptoms. They are often put into your IV without you knowing, which may be okay with you. They may, however, cause amnesia (e.g., Versed), or make you very sleepy. They can keep you from being able to nurse your baby (or to remember that you did), and to remember the first hours of your baby's life. If you want to stay awake for this time, discuss this with your anesthesiologist ahead of time. You might ask the anesthesiologist not to give you anything for nausea or trembling unless you ask. You may very well be able to tolerate the symptoms, but if you find you cannot, then you can ask for the medication.
- Post-operative pain medications are available to help you during the days and weeks after the birth. Some women try to avoid using them due to worries

about possible effects on the baby. However, since very small amounts reach the baby, the effects to be minimal. The baby nurses and remains awake and alert for periods of time. The downside of avoiding pain medications is extreme pain, which greatly reduces your ability to move about and to care for, nurse, and enjoy your baby. With adequate pain relief, you can have more normal interactions with your baby.

The first few days:

- Most hospitals have a bed available for the partner so he or she can remain in the hospital with you. This is lovely for many reasons. You are together as a family. Your partner can share in baby care. If your partner is there, your baby can probably room in with you the entire time. If he or she is not there, you will need help from the nurse to change the baby's diapers, move him from one breast to the other, and carrying him, even for short distances. In some hospitals, the baby spends more time in the nursery if the partner is not there.
- Breastfeeding is definitely possible, but presents some challengs after a cesarean. Nursing positions such as sidelying, and the "football" or clutch hold avoid painful pressure on your incision. Using a pillow over the incision also reduces pain while holding your baby on your lap. Ask for help from the hospital's lactation consultant in getting started with nursing.
- Rolling over in bed can be very painful, if you don't know how to do it. The least painful way uses "bridging." To roll from back to side, first draw up your legs, one at a time so that your feet are flat on the bed. Then "bridge," that is, lift your hips off the bed, by pressing your feet into the bed. While your hips are raised, turn hips, legs, and shoulders over to one side. This avoids strain on your incision.
- Help at home is essential to a rapid recovery. If possible, someone in addition to your partner should help keep the household running smoothly. If that person knows about newborn care and feeding, all the better. All three (or more) of you need nurturing and help during the first days and weeks to ease and speed your recovery and help you establish yourselves as a happy family.

As you can see, there are many possible options for a cesarean birth. Some are personal touches and personal self-care measures that will improve your satisfaction and self-confidence. Others are measures that involve the support of the hospital staff and your doctors. After thinking about your own preferences, prepare a birth plan, review it with your caregiver, and bring it to the hospital for the nurses to read.

I hope these suggestions will help you have the best cesarean ever!

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Postural Management for Breech Position

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Topic Overview

By the end of a pregnancy, a fetus is typically positioned head-down (vertex), ready to pass head first through the birth canal. Sometimes a fetus is in a bottom-down, or breech, position as the due date approaches. Postural management is a way of attempting to turn a fetus from a breech (See figure 1 in appendix) to a vertex position by lying or sitting in a certain position several times a day.

Postural management is controversial, because it has not been proved effective for turning a breech fetus into a head-down position. This practice has not been studied very much. More research is needed to find out if it works.

Postural management is generally considered a safe practice for pregnant women. But be sure to consult a doctor before trying any of these methods, especially when being treated for a medical condition, such as high blood pressure.

Postural management methods that use gravity to try to turn the baby's head down toward the cervix include:

- Propping up your hips by lying back on a firm surface with your feet on the floor and your knees bent. Raise your hips up by about 30 cm (12 in.) using large pillows (such as couch cushions) placed under your lower back and buttocks.
- Raising your hips by lying on a slanted board. One end of a wide board (such as a full-size ironing board) is propped up about 30 cm (12 in.) to 46 cm (18 in.) off the floor, on the seat of a couch or sturdy chair. Lie on the board with your head toward the floor, your knees bent, and your feet flat on the board.
- Sitting in a knee-to-chest position with your thighs pressed against your stomach.

These positions are usually held for 15 minutes and repeated several times a day for a week or more. It is helpful to do them with an empty stomach and bladder and to relax as much as possible while in position. You may need some help getting into the correct position safely. Because you may feel light-headed when you get up, have someone help you rise slowly to prevent a fall.

Credits for Postural Management for Breech Position

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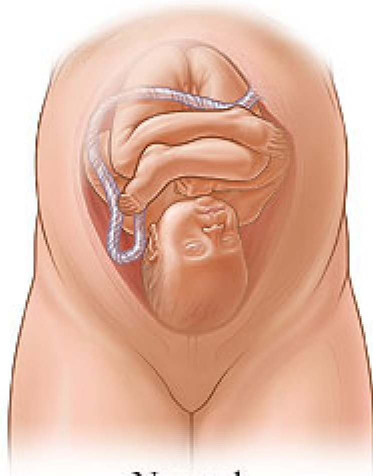
Specialist Medical Reviewer	William Gilbert, MD - Maternal and Fetal Medicine
Last Revised	October 4, 2011

Appendix

Topic Images

Figure 1

Breech Position



Normal

Frank breech

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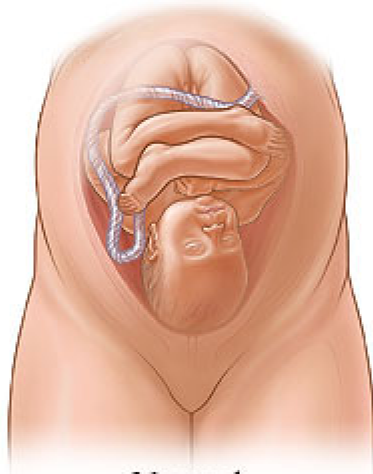

Normal

Complete breech

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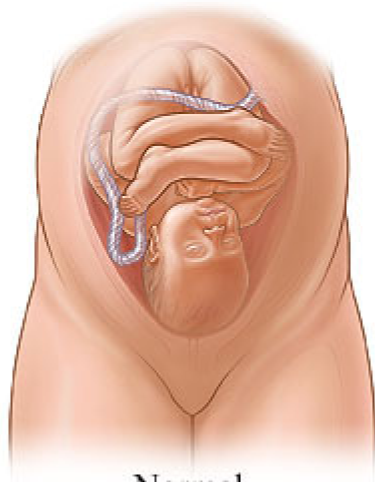

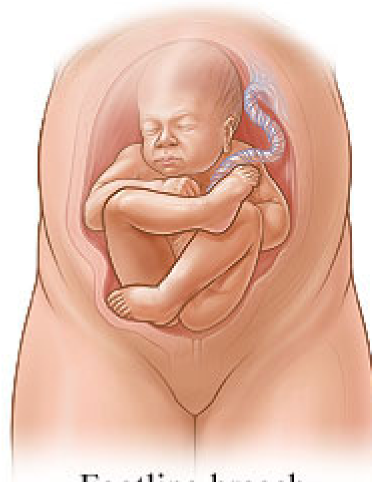

A fetus with the buttocks, legs, or feet pointing down toward the cervix is said to be in breech position. Before birth, most breech fetuses change position so that the head points downward. But some fetuses stay in breech position late into the third trimester.