

## **Pain during childbirth: What can we do about it?**

Women have different levels of pain and prefer different methods of pain relief during childbirth. Some women get enough pain relief with breathing and relaxation techniques. Others will choose to receive pain medications given into a vein (“IV”) to help dull the pain. About a third of our patients ask for an epidural block for pain relief. This teaching sheet talks about medications and anesthesia.

**Intravenous (“IV”) medications** help you to deal with the pain of labor but they do not stop the pain completely. Side effects may include nausea, vomiting and itching. Since they can make you and your baby sleepy, we give you less towards the end of your labor. IV medications are ordered for you by your doctor or midwife and they are given to you by your nurse.

**Epidural block** for labor is an injection of medications between the bones of your lower back, next to the spinal sac. This gives you complete or almost complete pain relief in most cases. It numbs the lower part of the body without making you or your baby sleepy but many people do fall asleep because they don’t feel pain anymore. The epidural block is used for labor pains as well as for cesarean sections. It is performed under the supervision of a specialist doctor called an anesthesiologist.

### **How is the epidural block done?**

The epidural block is given in the lower back, below the end of the spinal cord. You will be sitting or lying on your side. You will put your chin to your chest and push your lower back outwards like the letter C. This will help open the space between the backbones.

The anesthesiologist will numb your skin with local anesthetic (like Novocaine). Through the numb skin a special needle is used to find the epidural space which is just outside the spinal sac. A small tube called an epidural catheter is placed through this needle and into the epidural space. The catheter is like a very thin IV tubing. The needle is then taken out and the epidural catheter is left in your back until your baby is born.

Without any more needle sticks a small, test dose of medicine will be given through the epidural catheter to make sure that the tip is not in a blood vessel or in the spinal sac. Then the catheter is taped to your skin. More medicine injected through the epidural catheter will relieve your pain in 10-20 minutes. The medicine will often make your leg muscles weaker for the duration of the block.

A continuous infusion of medication will be given through the epidural catheter. This will keep you comfortable throughout your labor. You may choose to have “patient controlled epidural analgesia” (PCEA). By this method you can control the amount of medication you receive by pushing a button.

Once the epidural has relieved your pain, your nurse will place a tube in your bladder. You may not eat until your baby is born and you will need to stay in bed until the block wears off after delivery.

### **What are the risks of the epidural block?**

Rarely complications or side effects can occur, even though you are watched carefully:

- Your blood pressure may drop and you may feel nauseated or light headed for a few minutes. We can quickly treat this by turning you on your side and giving you fluids and medications I.V.
- An epidural may not work because the tip of the catheter is in a vein. We find out about this after the test dose. We pull out and replace most of these catheters.
- If the epidural needle goes too far it will make a hole in the spinal sac. You can decrease the chance of that by holding still during the needle placement. If a hole is made in the spinal sac we will often place the catheter through it. These “spinal catheters” are better than the epidural catheters in controlling your pain but you may develop a headache the next day. Some of these headaches will need further treatment.
- Nerve problems in the legs after childbirth are just as common in women who do not have epidurals as in women who do. These nerve problems are almost always caused by the baby’s head pushing on nerves along the birth canal, and are very rarely due to epidural anesthesia. If you experience any weakness in the legs or other nerve problems, your anesthesiologist will help to evaluate the problem and make sure you have proper follow up.
- Major complications such as nerve damage, paralysis or infection are **extremely rare** (less than 1 in 20,000 cases)

### **How will the epidural block affect my labor? Are there risks or side effects?**

Women who use epidurals do not appear to be more likely to need a cesarean delivery or have the length of their entire labor prolonged. Epidurals may prolong the second stage of labor for some women, when you are pushing your baby out of your body.

Women who use epidurals are more likely to need a vacuum extractor put on their baby’s head to help pull the baby out of their body. This may make your perineum (area between the vagina and the anus) more likely to tear during delivery.

Using an epidural does not increase infection in mothers and babies but might make your temperature go up. Then your baby might need blood tests and antibiotics.

## **What if I need a cesarean section?**

Cesarean section (C-section) deliveries can be performed safely under epidural, spinal or general anesthesia. Choices depend on your medical condition, your baby's condition and when possible, your preferences.

Some patients are considered to be at high risk for requiring a cesarean section for their delivery. This may be due to concerns with the health of you, your placenta or your baby. Your doctor or midwife will let you know if you fall into one of these groups. If you fall into one of these groups you may be encouraged to have an epidural placed. This would be to provide the safest care for you and your baby.

**Epidural anesthesia** is usually used when a patient has had an epidural catheter placed for attempted vaginal delivery. The patient has been unable to deliver vaginally and her physician has chosen to deliver the baby by cesarean section. A much stronger drug can be injected in the epidural catheter. This will allow you to have a pain free cesarean section while remaining awake throughout the procedure.

**Spinal anesthesia** is given with a very thin needle that is advanced between the bones of the lower back into the spinal sac, below the end of the spinal cord. A small amount of medication injected into the spinal fluid quickly numbs your body from your toes to your chest. Since the spinal needles used today are so thin, the hole made in the spinal sac is small and the chances for a headache are very low.

**General anesthesia** is used most often when an emergency cesarean section is needed. It can be started very quickly by giving medications into your vein to put you to sleep. After you are asleep a breathing tube is placed through your mouth into your windpipe (trachea). It is important that you do not eat anything after your active labor pains begin. This is because stomach contents could come up and go into your lungs causing a life threatening pneumonia.

It is our goal to help you understand your choices for pain relief and support your decisions.

Please discuss your pain relief options and possible side effects with the providers of your obstetric care. If necessary, a consultation with an anesthesiologist can be arranged before your due date.

You may find more information on <http://www.brighamandwomens.org/painfreebirthing/>