



*Anesthesia*  
AND YOUR  
BIRTHING  
EXPERIENCE



Presbyterian Hospital

Presbyterian Hospital Huntersville

Presbyterian Hospital Matthews



our labor will result in one of the most thrilling and gratifying experiences you

will ever have – the birth of your child! Your anesthesiologist with Presbyterian Anesthesia Associates wishes to partner with you and your obstetric caregiver and nurse to make this experience as safe and pleasant as possible. We are dedicated pain relief specialists present at Presbyterian Hospital, Presbyterian Hospital Huntersville and Presbyterian Hospital Matthews 24/7 to provide state-of-the-art pain management tailored to you and your labor.

As you prepare yourself for birth, we encourage you to learn as much as possible about pain treatment options so that you will be ready to make decisions throughout your birth experience. Understanding how an epidural is administered and the benefits and potential risks of an epidural will prepare you to make an informed decision for you and your baby as your birth unfolds.

#### **WHAT WILL LABOR BE LIKE?**

As each woman's labor is unique, so each woman experiences labor discomfort differently. Many factors influence how you feel – the size and position of your baby, how well labor progresses, your prior birth experiences and your level of pain tolerance. Although some women cope with labor



using only breathing and relaxation techniques, many choose to combine these with pain medications or an epidural. If you elect to have intravenous or intramuscular or local anesthesia pain relief, your obstetric caregiver will provide these for you. Your anesthesiologist will provide any regional pain relief (epidural or spinal analgesia) for you.

#### **TELL ME MORE ABOUT EPIDURALS...**

Epidural and spinal analgesia reduces pain during labor while allowing you to remain awake and able to participate in your delivery. Local anesthetics and other medications are used in these techniques to "block" pain messages that travel from your uterus and cervix through the spinal cord to your brain. Regional 'blocks' can be used to decrease sensation for labor and

delivery (analgesia) or completely reduce painful sensation for cesarean section or other operative procedures (anesthesia).

They are popular because they are the most effective techniques for providing pain relief during childbirth. The appropriate time to receive an epidural is unique to each person and depends upon your progress of labor and baby's responses as well as your level of discomfort and other individual factors. As we strive to balance your comfort, safety and ability to push effectively for delivery, you should not necessarily expect a total lack of feeling or a sense of pressure during contractions. Also, epidurals and spinals may not be good choices in some situations. These situations may include bleeding, abnormal blood clotting, neurological disorders and abnormalities of the spine.

## HOW ARE EPIDURALS PERFORMED?

An epidural is performed in the lower part of the back known as the lumbar area. You will be asked to sit up or lie on your side, relaxing and curving your back out to widen the spaces between the vertebral bones. We cleanse your skin with antiseptic solution, and then inject some local anesthetic solution to numb a small area of the back. Although this stings for a few seconds, you should feel only pressure during the rest of the procedure. A special needle is placed in the epidural space (a long, sleeve-like space inside the bony vertebral column but outside the spinal fluid sac). A tiny flexible tube called an epidural catheter is threaded through the needle, then the needle is removed and the catheter is taped in place. A brief tingling sensation sometimes occurs in the back or legs if the catheter brushes against a nerve on insertion, but this usually lasts only seconds.

Spinal analgesia is occasionally used when labor is progressing rapidly and delivery is expected in the immediate future. Pain relief occurs rapidly and lasts about an hour and a half. The procedure is similar to an epidural, but is quicker to perform. A very small specially designed needle is used that results in a very low risk of a headache.



### WHAT CAN I EXPECT FROM MY EPIDURAL?

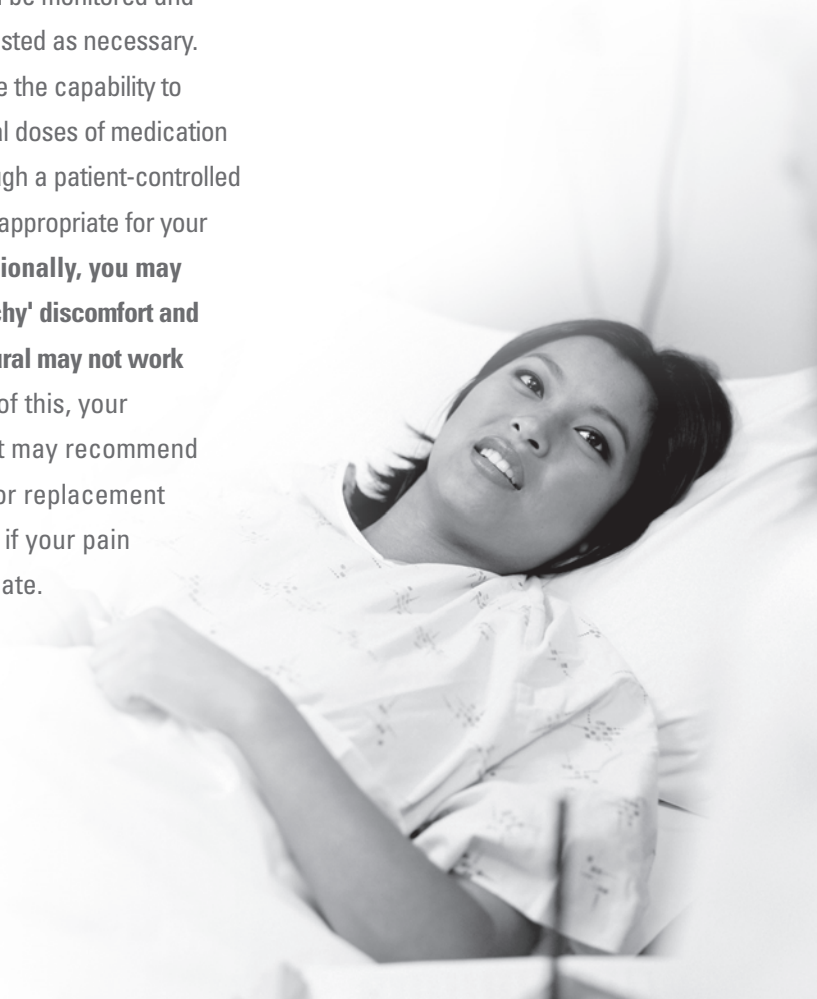
Medication given through the epidural catheter surrounds nerves passing through the epidural space, keeping you more comfortable through labor though often still aware of your contractions. Pain relief occurs gradually over 10 to 20 minutes with contractions feeling progressively shorter and less intense. You may note warmth and heaviness of your lower body during the epidural.

**Remember, the epidural does not eliminate all feeling or discomfort during this experience.**

Throughout labor your comfort and progress will be monitored and medications adjusted as necessary. You will also have the capability to provide additional doses of medication for yourself through a patient-controlled epidural pump if appropriate for your situation. **Occasionally, you may experience 'patchy' discomfort and rarely your epidural may not work for you.** In light of this, your anesthesiologist may recommend adjustments to or replacement of your epidural if your pain relief is inadequate.

### WILL AN EPIDURAL SLOW LABOR AND AFFECT DELIVERY?

Every woman wants a speedy labor and a normal delivery. However, many factors influence the progress of labor and the need for assisted vaginal delivery or cesarean section. In some women, contractions may briefly decrease in frequency after an epidural, whereas in others labor progresses more rapidly once pain is relieved and the mother is relaxed and stress-free. Indeed, most mothers find they are able to rest more easily during labor allowing them to have more energy to push effectively when necessary.



## **HOW WILL REGIONAL ANALGESIA AFFECT MY BABY?**

There is considerable evidence that uncomplicated regional analgesia is safe for your baby. Some experts believe that relief of severe maternal pain and stress may actually benefit the baby. Epidural or spinal analgesia relaxes the mother while avoiding the sedative effects of IV or IM narcotic drugs. Temporary changes in the fetal heart rate occur frequently in normal labors and can occur with both regional blocks and narcotic medications. When not caused by other reasons, these changes are not associated with any long-term effects.

## **WHAT ARE THE RISKS OF EPIDURALS?**

As with any medical treatment, side effects or complications occasionally occur. We will monitor you and your baby carefully and take precautions to prevent problems. Because blood pressure can decrease following an epidural, you will have an IV and be given fluids beforehand.

Although uncommon, a headache occasionally follows regional anesthesia. Holding still during needle placement decreases the likelihood of a headache. If the discomfort does not resolve with rest, fluids and pain medications, additional treatment can be given.



Very rarely, the medication in regional blocks can cause the chest wall to feel numb and make it feel hard to breathe. This sensation usually disappears by itself, but may be helped by breathing oxygen. Occasionally, the epidural needle or catheter enters an epidural vein, because these become swollen during pregnancy like varicose veins and hemorrhoids. If this occurs, the epidural needle or catheter is repositioned to ensure that the medication is placed where it can provide effective pain relief. Serious adverse reactions to drugs entering a vein or the spinal fluid are very rare because safe doses and techniques are employed. When larger doses of medications are given, such as for cesarean section anesthesia, we usually give a small “test dose” to make sure the medication is in the right place.

Shivering, nausea and vomiting can occur during labor, with or without a regional block. If these symptoms are troublesome, medication is available

to help treat them. Backache is common during pregnancy and often continues after your baby is born. There is good evidence that epidurals do not cause long-term backache, although there may be slight local tenderness for a few days.

Life-threatening or serious complications (such as unusual drug reactions or nerve damage due to bleeding or infection near the spinal cord) are extremely rare with regional blocks given for labor pain relief. You should feel free to discuss any concerns with your anesthesiologist.

#### **ANESTHESIA FOR CESAREAN BIRTHS**

Your anesthesiologist will discuss your general health, pregnancy history and other factors with you that may influence the type of anesthesia that is safest for you. Most often, you will have a regional anesthetic (a spinal or epidural) so you will be awake for the

birth of your baby. If you already have a labor epidural, this can often be extended with stronger medicine to provide anesthesia for cesarean delivery. With regional anesthesia, you should not feel pain, but you may feel pressure during the birth of your baby. Your partner or support person can be present with you during your delivery.

On occasion, general anesthesia may be necessary when regional anesthesia is not the best choice for medical or other reasons. General anesthesia can be started quickly to make the mother unconscious during the delivery. Pregnant women have slower stomach emptying and are at greater risk of aspiration – stomach contents entering the lungs during unconsciousness. This can result in a serious pneumonia. To decrease this risk, your anesthesiologist will take special precautions to protect the lungs including placing a breathing tube



in your windpipe after you are asleep. You will also be given an antacid before anesthesia to help neutralize any acid in the stomach.

For your safety, it is important not to eat any solid food (including milk products) once you are in active labor, regardless of your plans for delivery or pain relief. Moderate amounts of clear fluids and ice chips are usually allowed in normal labors.

#### **PAIN CONTROL AFTER CESAREAN DELIVERY**

If you have regional anesthesia, your anesthesiologist will often include narcotic medication with the local anesthetic to provide pain relief for most of the first day after surgery after the numbness of the anesthetic has worn off. Your obstetrician will also order pain medication for you given through the IV, as an intramuscular shot or as pain pills. Narcotics given by any route can cause itching or nausea. If these symptoms are troublesome, medications are available to treat them.

#### **OUR COMMITMENT TO YOU**

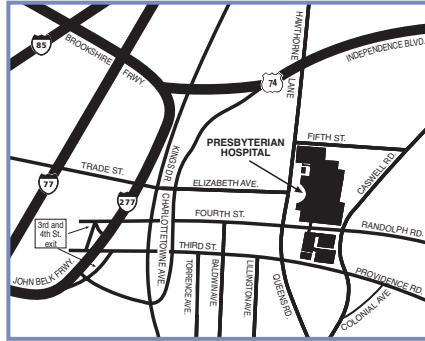
Please feel free to ask your anesthesiologist any questions you still have about pain relief options. If you have any special medical or obstetric problems, your obstetrician may refer you for consultation with one of us at Presbyterian Anesthesia Associates before your delivery.

Our hope is that you now have a better understanding of what is involved with regional pain relief. We are committed to partner with you to achieve the shared goal of a safe and rewarding childbirth experience!

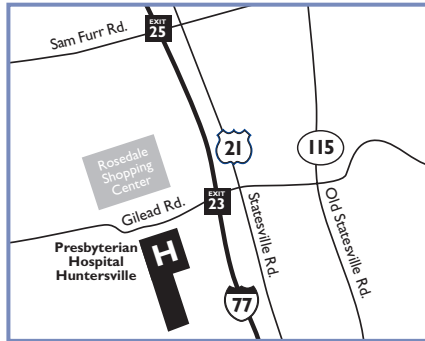
#### **RESOURCES FOR FURTHER INFORMATION**

1. The American Society of Anesthesiologists website at [www.ASAhq.org](http://www.ASAhq.org)
2. Easy Labor: Every Woman's Guide to Choosing Less Pain and More Joy During Childbirth, William Camann, MD and Kathryn J. Alexander, MA
3. Enjoy Your Labor: A New Approach to Pain Relief for Childbirth, Gilbert J. Grant, MD

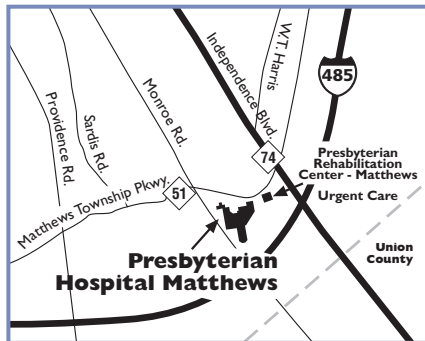




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