Regional Anesthesia for Hip Replacement Surgery
Common Questions and Our Answers

What type of anesthesia will I have for my hip replacement?
Hip replacement surgery can be done under general anesthesia or regional anesthesia. On the day of surgery, your anesthesiology doctor will talk with you about the risks and benefits of both anesthesia types. They will decide what would work best for you. General anesthesia means that you will be fully asleep using medicines through an intravenous (IV). Once you are asleep, a breathing tube is placed down your windpipe. This helps to give anesthesia gases to keep you asleep during surgery.

What is regional anesthesia?
Regional anesthesia uses an injection of numbing medicines to numb part of the body. For hip surgery this usually refers to a “combined” spinal epidural or CSE. The spinal portion uses a single injection of numbing medicine into the sac of fluid bathing the spinal cord. Next, an epidural or small catheter tube is placed just outside the covering of the spinal cord (called the epidural space). This tube is used to send medicines close to the nerves. These medicines are local anesthetics. They work in the same way as numbing medicines that are used at the dentist, except it numbs nerves where the surgery will occur. You will become completely numb below the waist from the single injection of numbing medicine into the spinal fluid, for 2 to 4 hours. The epidural “tube” can be used in the operating room to send more numbing medicine, if the spinal starts wearing off. Sometimes, we keep the epidural in place overnight to deliver weaker numbing medicines. This will help lower the amount of pain you are feeling after surgery.

Placement of the combined spinal epidural is done with you sitting up or lying on your side. You may get intravenous sedation during placement of the combined spinal epidural. First your back is cleansed with a sterile soap. Next, a small bit of numbing medicine is injected into the skin where the epidural needle is inserted. The epidural needle is carefully advanced into the epidural space. Next a very small spinal needle is inserted through the epidural needle. This will send numbing medicines into the sac of spinal fluid. The spinal needle is removed and a plastic, flexible catheter is placed (this catheter is about the width of a guitar string) into the epidural space. You should feel very little discomfort while the CSE is being placed. Finally, the epidural needle is completely removed, a sterile dressing applied and the plastic catheter is taped into place.
If I get a combined spinal epidural (CSE), will I still be asleep for surgery?
Usually with a CSE you will be given intravenous sedation during surgery that keeps you sleepy. You should not feel any pain because you will be numb from the CSE. Most patients remember very little with sedation. They wake up faster and feel less groggy compared to a general anesthetic.

When can I get a combined spinal epidural (CSE)?
On the day of surgery, you will be admitted to a private room adjacent to the operating room. An anesthesiology doctor will talk about your anesthetic plan and possible CSE. If you decide to get a CSE, the procedure is usually performed in the same room.

How many days does an epidural stay in place?
For hip surgery, we usually take it out after surgery in the operating room. Occasionally, the epidural is kept in place overnight (or longer) for pain management. An anesthesiology doctor will help manage your pain and see you in the hospital every day your epidural is in place.

Is it hard to remove an epidural?
No. Taking out the epidural is very easy and is like removing a band aide.

What are the risks of combined spinal epidurals (CSEs)?
Although CSEs are very safe, there is a small risk of complications. Shivering, itchy skin, and backache are common. The epidural or spinal can cause a drop in blood pressure. This is easily corrected but needs frequent monitoring. Sometimes the CSE can cause numbness to only one side of your body or not work at all and general anesthesia is necessary. The epidural catheter can accidentally fall out. A “spinal” headache after placement of a CSE can happen in 1-2 out of 100 patients. This type of headache is made worse when you sit up and gets better with lying flat. Although these headaches can be severe, they are treatable and usually have no long-term side effects. Infection or bleeding around the spinal cord and nerve injuries are very rare. Rarely CSE numbing medicines can be placed into a blood vessel. This can have serious effects on heart rate and being able to breathe.

Who should not get combined spinal epidurals?
Patients who have bleeding problems should not get CSEs because of a greater risk of bleeding. Patients with severe infections may not be able to have a CSE. There is a risk of getting bacteria to the nerve roots and causing nerve injury. CSEs may be harder to place in patients with prior back surgeries. If you have had major back surgery, it may be helpful to have prior x-rays or surgical records for the doctor to look at. On the day of your surgery your anesthesiology doctor will talk about the benefits and considerations/risks of a CSE.