

## △ GENERAL INFORMATION

Spinal anesthesia involves a single injection of a local anesthetic medicine into your back that produces numbness and muscle relaxation of the region of your body from about your waist down to your toes. For this reason, it is called a “regional” anesthetic.

Spinal anesthesia is most commonly used for operations on the legs, groin, organs in the pelvis, and buttocks.

It is important that the person giving you anesthesia has skill and experience and is caring. This person needs to know a number of ways to anesthetize a patient and which method to use for a specific patient with a particular problem. Before, during, and after the operation, the anesthesiologist or anesthetist will be concerned about a number of things.

## BEFORE COMING TO THE OPERATING ROOM

- You will have an examination of your blood and urine and possibly of your heart (EKG) and lungs (chest x-ray) as well as other tests as requested by the surgeon and anesthesiologist.
- You may take your usual medications on schedule with a sip of water. The only medications you should not take the day of surgery are diuretics (water pills). If you take medicine for diabetes or depression, your doctor will give you instructions on whether to take them.
- The anesthesiologist will review your medical record to learn some things:
  - The nature of your present problem: The anesthesiologist knows which operations are best suited for spinal anesthesia.
  - The nature of other medical problems you might have: A history of heart attack, breathing problems, and other medical problems can make a significant difference in the type of anesthetic you should have and what to watch for during the operation.
  - Results of laboratory tests: Abnormalities can give important clues to the severity of medical illnesses and the precautions to be taken.
  - Medicines you are taking: This is important information to know. Also, it is vital that you tell the anesthesiologist of reactions to drugs or to a previous anesthetic so that these can be avoided.
- Interview: There will be an interview of your health in general and a brief physical examination.
- The anesthesiologist will examine your backbone to assess the ease of doing a spinal anesthetic, if this is the anesthetic choice.
- The anesthesiologist will determine whether any special arrangements (for anesthesia equipment and medications) should be made based on the nature of the operation to be performed.

You will be informed of the type of anesthesia planned and the reasons for it. The considerations are as follows:

- **Local Anesthesia:** A fine needle is used to inject an

anesthetic in the area to make it numb. Also, you may be given medicine to make you feel drowsy.

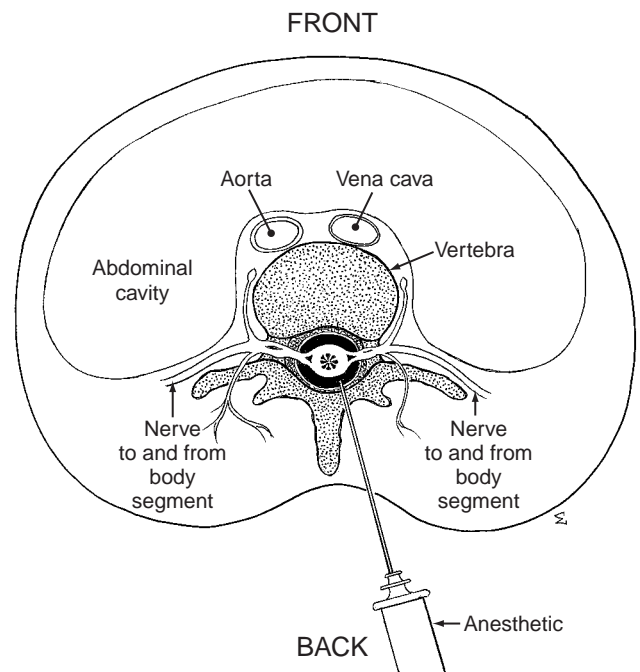
- **Regional (Nerve) Anesthesia:** This can be done by anesthetizing a bundle of nerves, producing numbness to your legs or arms as needed for the surgery.
- **General Anesthesia:** You might be anesthetized by having an anesthetic medicine injected into your intravenous fluids or by breathing an anesthetic vapor.

In your instance, the recommendation is that you have a spinal anesthetic.

## SPINAL ANESTHESIA

The spinal column has a tunnel on its back part that runs through its entire length. Inside this tunnel runs the spinal cord (it's a little thicker than a pencil) from the bottom of your skull to just below your waist. Nerves come from and go to the spinal cord all along its length. They carry all the sensations (including pain) from the body to the brain. In return, signals from the brain come down the cord and travel along these nerves to make your body move as necessary.

A “spinal” involves giving a local anesthetic next to the nerves that leave the spinal cord (Fig. 1). When this anesthetic touches a nerve coming off the spinal cord, the sensation of pain and the ability to move the muscles



**Figure 1.** One vertebra as seen from the top. The needle connected to the anesthetic solution is inserted so that it is in the spinal fluid (black area) that surrounds the spinal cord (asterisk). The anesthetic solution is now injected into this area. The nerves that go to and from that area of the body are bathed by the solution. That segment now is paralyzed and has no sensation.

below that area are no longer present. The anesthesiologist can control how long this will last by using drugs that wear off after different lengths of time.

When the operation is over and the anesthesia wears off, your sensation and movement will gradually return to normal.

### **IN THE OPERATING ROOM**

- You may be given some medication that will make you feel slightly drowsy.
- You will have some fluids started in your vein. Also, you will have a blood pressure cuff placed around your upper arm that will measure your blood pressure frequently. Some EKG wires will be taped to your skin. They will record your heart rate and rhythm.
- You will then be asked to sit on the operating table or to lie on your side. In either case, once in position, you will be asked to bend forward as much as possible. This position is just temporary; it helps the anesthesiologist to perform the spinal anesthetic.
- Your lower back will be swabbed with an antiseptic solution and the area surrounded with sterile towels.
- A very thin, tiny needle will be used to inject an anesthetic into the skin to make it numb.
- The anesthesiologist will then use an extremely thin needle to inject less than half a teaspoon of local anesthetic right next to the spinal nerves.
- In about 5 minutes, your feet and buttocks will begin to feel warm, then tingle, and finally “fall asleep.”
- The operating room staff will then get you in the appropriate position for the operation.

### **DURING THE OPERATION**

- The part of your body being operated on will remain numb during the operation. Also, you will not be

able to move that part of your body during the operation.

- You will be awake and be able to talk. However, medicine is available if you want to feel very drowsy or be in a “twilight sleep” during the operation.

### **AT THE END OF THE OPERATION**

- The anesthesia team will accompany you to the recovery room where they will inform the recovery room nurses about what took place in the operating room. The recovery room nurses will also be informed about your spinal anesthetic and will follow the instructions for routine care of patients who have had a spinal.
- Your heart rate, blood pressure, and breathing will be monitored closely. After they are stable and you are alert, a decision will be made about discharging you from the recovery area. You will need to be able to walk (with a little help), be able to drink some fluids, and finally be able to urinate before you can go home.
- You will be permitted to go home that same day only if you are accompanied by a responsible adult.

### **⊕ HOME CARE ON THE DAY OF THE OPERATION**

- Take it easy for the day; do not engage in any physical activity; follow the surgeon’s instructions.
- Eat a bland diet.
- Have a member of the family or a friend stay with you overnight.

### **📞 CALL OUR OFFICE IF**

- You develop a headache.
- You develop any backache, stiff neck, or fever.
- You develop a temperature higher than 100°F.
- You have any questions.