Spinal Cord Stimulator Trials

What is a spinal cord stimulator?
A spinal cord stimulator is a device that is implanted to stimulate nerves close to the spinal cord. This stimulation is thought to interrupt the transmission of the pain impulse, reducing or eliminating severe pain. The system consists of electrical leads, which are implanted in the spine, and a transmitter. The transmitter looks like a pacemaker and is placed under the skin in the patient's abdomen.

Spinal cord stimulators are often helpful for patients with severe, unremitting pain, which cannot be relieved by other methods. Patients suffering from "failed back syndrome" are often good candidates for this procedure, especially if they have persistent leg pain.

Your physician will carefully review your history and diagnostic tests to determine whether the stimulator is likely to help you. A temporary stimulator (the trial stimulator) is usually placed prior to the permanent implantation of the system to find out whether it will be helpful in controlling the pain.

Is there any special preparation for a spinal cord stimulator procedure?
Your physician will review your medications to determine if any will need to be stopped prior to the procedure.

You should not eat or drink anything for 6 hours prior to your appointment. You should plan to have someone drive you home after the procedure.

What happens during the spinal cord stimulator procedure?
You will lie face down on a special table. The area is cleansed and a local anesthetic is injected to reduce any pain associated with the procedure. It is necessary that you remain awake so you can describe sensations as the procedure is carried out.

Using X-ray guidance, a needle is inserted close to the stimulation area. The electrical leads, which carry the current, are inserted through the needle and implanted close to the spinal cord. Most of the leads are implanted in the mid-section of the spine, but this depends on your pain pattern. A battery is then connected to the wires to generate the current. You usually will feel a tingling sensation with the stimulation.

After a brief observation period, you will be allowed to go home. The temporary stimulator will be left in place from several days to 2 weeks.

What should I expect after the spinal cord stimulator procedure?
You should keep the insertion site clean and dry. Your physician will instruct you on the use of pain medication. You may call (404) 778-7000 if you have any questions.