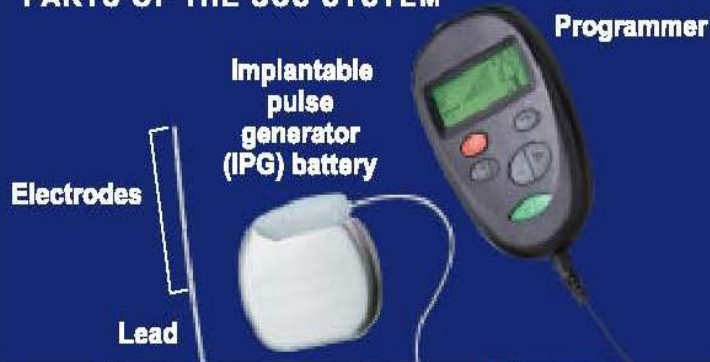


PARTS OF THE SCS SYSTEM



Spinal Cord Stimulation

Spinal cord stimulation (also called SCS) uses electrical impulses to relieve chronic pain of the back, arms and legs. It is believed that electrical pulses prevent pain signals from being received by the brain.

STEP 1

The injection site is anesthetized. One or more insulated wire leads are inserted through an epidural needle or through a small incision into the space surrounding the spinal cord, called the epidural space.

STEP 2

Electrodes at the end of the lead produce electrical pulses that stimulate the nerves, blocking pain signals. The patient gives feedback to help the physician determine where to place the stimulators to best block the patient's pain. The lead is connected to an external trial stimulator. The trial typically lasts around seven days. If the patient and physician determine that the amount of pain relief is acceptable, the system may be permanently implanted.

STEP 3

The permanent implantation may be performed while the patient is under sedation or general anesthesia. First, one or more permanent leads are inserted through an epidural needle or small incision into the predetermined location in the epidural space.

STEP 4

Next, a small incision is created, and the implantable pulse generator (IPG) battery is positioned beneath the skin. The lead is then connected to the IPG battery.

STEP 5

The implant's electrical pulses are programmed with an external control unit. The patient can use the external control unit to turn the system on or off and adjust the stimulation power level and switch between different programs.

END OF PROCEDURE

After surgery, patients may experience mild discomfort and swelling at the incision sites for several days.

