

What is the epidural space?

The membrane that covers the spine and nerve roots in the neck is called the dura membrane. The space surrounding the dura is the epidural space. Nerves travel through the epidural space to the neck, shoulder and arms. Inflammation of these nerve roots may cause pain in these regions due to irritation from a damaged disc or from contact with the bony structure of the spine in some way.

What is an epidural and why is it helpful?

An [epidural injection](#) places anti-inflammatory medicine into the epidural space to decrease inflammation of the nerve roots, hopefully reducing the pain in the neck, shoulders and arms. The epidural injection may help the injury to heal by reducing inflammation. It may provide permanent relief or provide a period of pain relief for several months while the injury/cause of pain is healing.

What happens during the procedure?

The patient is placed and positioned in such a way that the physician can best visualize the neck using x-ray guidance. The skin on the back of the neck is prepped with iodine. Next, the physician numbs a small area of skin with numbing medicine. After the numbing medicine has been given time to be effective, the physician directs a small needle, using x-ray guidance into epidural space. A small amount of contrast (dye) is injected to insure the needle is properly positioned in the epidural space. Then, a small mixture of numbing medicine (anesthetic) and anti-inflammatory (cortisone/steroid) is injected.