

## DOUBLE-HOLE PENCIL-POINT SPINAL NEEDLE (ELDOR SPINAL NEEDLE)

### Eldor spinal needle technique

This is an innovative device in which there are two round opposing holes at the tip. The anesthetic solution will flow out of these two holes into the subarachnoid space at the direction of these two holes. The Eldor spinal needle separates Dural fibers rather than cutting them to reduce incidence of spinal headache. A small bore Eldor spinal Needle is inserted through an introducer until it pierces the Dural. Confirmation of its placement in the subarachnoid space is when CSF is obtained through the hub of the spinal needle. The local anesthetic solution is then injected through the spinal needle into the subarachnoid space. After the injection is completed the spinal needle is withdrawn and the patient is positioned as required. Local anesthetic injections

The local anesthetic solution injected into the subarachnoid space is exited through the two opposing holes positioned at the pencil point tip. The injection should be slow and gentle. The dose should be adjusted to every patient and to every operation. The orientation of the double holes is a factor for the administration of the anesthetic solution.

### Hazards

After confirmation of the Eldor spinal needle's position in the subarachnoid space, secure the needle during local anesthetic solution injection from forward or backward movements. Forward movement may cause paresthesias by the pencil point's tip touching a nerve root, while a backward movement may withdraw the Eldor spinal needle or its orifices from the subarachnoid space into the epidural space, resulting in partial spinal anesthesia.

### NOTE:

The key on the spinal needle hub indicates the direction of one of the distal spinal needle ports. The second port parallels that on the side of the key. Inject the desired dose of intrathecal medication at a rate, level and direction consistent with the desired spread of anesthesia or analgesia through both ports.

Follow national and/or institutional guidelines for patient monitoring appropriate to the administration of spinal anesthetics.

### Caution

Federal law restricts this device to sale by, or on the order of a physician.