# Accurately diagnosing and treating pain with personalized care

Our network of pain management physicians treats a variety of conditions, using comprehensive diagnostic techniques and non-surgical treatments for all musculoskeletal pain.

#### To learn more about conditions treated, visit NationalSpine.com or ask your affiliated physician.

### IT Pump

Implantable Medical Device to Deliver Pain Relief to Spinal Nerves





# LEAVE PAIN Behind. **Get Busy Living.**



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An intrathecal (IT) pump is a small medical device that delivers pain relief medications directly to the spinal cord. When medications are delivered here, they have a stronger and faster effect than medications taken in pill form. They also cause fewer side effects.

An IT pump is often a last-resort treatment for cancer pain. It is also useful for people with other chronic pain conditions such as post-

laminectomy syndrome, complex regional pain syndrome (CRPS), arachnoiditis, chronic pancreatitis, and chronic muscle spasms.



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#### How do IT pumps help?

An IT pump offers you superior pain relief, reduced side effects from medications, and more control over your treatment. Giving medications through an IT pump is very effective since the spinal cord is a place where pain-relief medications take effect. Giving medications directly to the spinal cord requires smaller doses, around 1/300th of the same medication in pill form. This results in lowered side effects like nausea, constipation, or drowsiness. Pumps are an excellent option for people with severe pain who can't tolerate opioid pills.

Pump medications usually include an opioid (Morphine) and sometimes a muscle relaxant (Baclofen) or another strong pain-relief agent (Ziconotide). Your pump can give you medicine constantly, in a way that provides a reliable pain-relief effect. You also have the option to use a remote control in order to give yourself extra medication when you need it.

## How is an IT pump implanted, and is it painful?

Your pain specialist will first perform a trial before deciding if an IT pump would help you. This involves a single shot of medication to the area around your spinal cord. It is not painful merely feels like a flu shot. This quick procedure is performed in your doctor's office, so you can go home the same day. If your pain decreases by at least 50%, the trial is successful and you are then scheduled for a pump implant. During the actual pump implant, your pain specialist will first place the pump (the part that holds and delivers the medicine) under the skin of your abdomen, right below the waistline. This placement is comfortable for you, and the pump is unlikely to show through your clothes. Then, a catheter (thin tube that delivers medication from the pump) is placed in your back, next to the spinal cord. Finally, the pump is connected to the catheter, and the medication flow is started. You go home the same day.

#### How often should this procedure be done?

An IT pump implant is a one-time procedure. Pump medications are refilled every three to six months or so, in your doctor's office. Your pump will work for up to seven years before its battery will need to be changed.

#### What are the expected results?

Normally, you have pain relief immediately after your pump implant. During the first couple of days, you may need some pain medicine in pill form as your body heals from the implant. During this time, your pain specialist will work closely with you to adjust the pump medication dose so you have the best pain relief possible. You should only engage in light activities over the next couple of weeks. You will also learn how to use the optional remote control.

#### A Network of Experts in Pain Management • NationalSpine.com

Medical Services are provided by independently operated physician practices that are branded as National Spine & Pain Centers.