

What is Intrathecal Drug Delivery?

It is possible to deliver medication directly to the brain or spinal cord. With targeted drug delivery, very small quantities of medications pain (such as opioids like morphine) are used, often with other medications, like local anesthetics, that cannot be given orally or by injection.

Because the drugs are being given directly to the brain or spinal cord, they are much more effective. So very small amounts can be many times more effective than doses given systemically (throughout the body) at much larger doses. And because these tiny amounts are delivered directly to the nervous system, often there are fewer or no side effects





2330 East Meyer Blvd, Suite 411B Kansas City, MO 64132 (816) 363-2500 x415 admin@CenterfortheReliefofPain.org

www.CenterfortheReliefofPain.org



Intrathecal Drug Delivery for Cancer Pain





TREATMENT OPTIONS, DIAGNOSIS-BASED, ALWAYS, WITHOUT FAIL, WITH THE PATIENT AT THE CENTER







"I thought I was doing ok, but I really don't remember much. I lay in a fetal position, crying. The medication made me tired, incoherent and forgetful. But if I didn't take them, the pain would become out of control. With the pump, I could stop all of them . . . and have no pain."

— Jeanne (pancreatic cancer)

CANCER PAIN

The pain of cancer can be very difficult to control. Not every cancer is painful and often, if there is pain, it can be controlled with simple medications. However, sometimes this is not the case and pain medications are ineffective. Or perhaps, while the medications can manage the pain, they cause unacceptable side effects, like fatigue, loss of appetite or

constipation. Under those circumstances, it can be very effective to use intrathecal drug delivery to control the pain without having the side effects. Studies have shown that. when compared to best medical management, intrathecal drug delivery can provide more effective pain control with much fewer side effects. There are even data that it might increase longevity.

PUMP PLACEMENT

The intrathecal pain pump is placed in the operating room with a small, 30 to 45 minute procedure. Usually under general anesthesia, a small incision is made in the lower back and a spinal tap is performed. Through this needle, a very small, soft catheter is placed next to the spinal cord using xray guidance. The position of the catheter within the spine is determined by the distribution of pain.

After catheter placement, a larger incision is made just through the skin for implantation of the pump. This can be placed in many locations, but the most frequent is the abdomen. Once the pump is



placed, the catheter is connected to it under the skin.

Complications are rare, but can include infection. spinal fluid leakage, spinal cord injury, fluid collections around the pump or catheter and mechanical issues. For a new placement, the patient is usually observed overnight in the hospital.

"The side effects of the pain medications were worse than the toll of the cancer. The pain was unbearable and so the vicious cycle started-more pain from the cancer meant more pain medication. Miraculously, the pain pump made me pain free." — Joseph (multiple myeloma)



PUMP MANAGEMENT

Once the pump is placed, it can become a very powerful tool for pain control and quality of life. It runs continuously and a device is provided allowing the patient to give more when needed (although controlled to prevent overdose). Changes in dosing are made wirelessly, without even having to remove clothing. The dose is aggressively changed when pain is still an issue, as often as daily and other medications can be tried within the pump as needed. Replacing those medications is a simple, 10-15 minute, office-based procedure, which, when the dose is stable, is done about every 3 months.

it is full also of the overcoming of it."

HELEN KELLER, OPTIMISM, 1903