

Valley Pain Specialists, PC

Consultants in Acute and Chronic Pain Management

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Intrathecal Drug Delivery Relieves Chronic Pain

Intrathecal drug delivery systems were first introduced in the early 1980's to deliver intrathecal morphine for patients with chronic pain. In addition to morphine, other medications including hydromorphone, bupivicaine, clonidine and baclofen are frequently utilized by pain management physicians. Ziconitide or SNX-111 (Prialt®) is an investigational new medicine also being administered via intrathecal infusion pumps at our center through a clinical research protocol.

Primary indications for intrathecal pump therapy include chronic pain that has failed conservative treatment including physical therapy, systemic medications, interventional injection therapies and often surgery. Common conditions include intractable sciatica, failed back surgery syndrome, reflex sympathetic dystrophy and some types of cancer pain. Spasticity related to multiple sclerosis or cerebral palsy can also be managed successfully with intrathecal baclofen.

Before implanting an intrathecal pump, the

patient undergoes a temporary trial in which a small catheter is percutaneously placed in the subarachnoid space (performed in an office setting). An infusion of intrathecal opioid is titrated upwards over a several day period until the patient either receives sufficient analgesia or unacceptable side effects. Upon completion of the trial the patient is discharged from the hospital. The subcutaneous programmable pump and catheter is implanted at a later date under general anesthesia in the operating room. Patients are generally discharged home the same day. The dose of medication is adjusted periodically non-invasively via telemetry. Patients are seen afterwards every 2-3 months in the office for refilling of the pump.

Side effects and complications of intrathecal pumps include infection, mechanical malfunction, catheter disconnections and leakage, or drug related side effects. Postdural puncture headache may accompany the trial or pump placement. Once implanted, patients may undergo all radiologic diagnostic studies, however, it is recommended that the pump be interrogated and temporarily stopped before MRI studies. Currently most programmable pumps have a battery life of 4-5 years at which point re-operation to replace the battery is necessary.

For Information and Referrals:

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