



Pain Care Associates

A Division of Neuro Pain Consultants, P.C.

*A multidisciplinary practice
dedicated to the relief of pain.*

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INTRASPINAL TREATMENT

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Treatment of Pain with Intraspinal Opioids

Chronic intractable pain causes extreme suffering for many people. Research has shown that when medication is delivered directly into the spinal fluid (intraspinal) by a mechanical system, this extreme suffering may be relieved. Through this type of delivery system, the medication binds directly to the pain receptors in the spinal cord and blocks the pain impulses. This prevents the pain message from reaching the brain, where the pain message is perceived. The mechanical system for this type of medication delivery is called an implanted intrathecal pump.

What is an Implanted Intrathecal Pump?

An implanted intrathecal pump is a drug delivery system used to deliver opioids and other medications directly to the pain receptors in the spinal cord. Currently, two basic systems are available. One is a constant flow delivery pump, the other a computerized programmable pump. The pump size is comparable to the palm of the hand or a hockey puck. Both pumps require a minor surgical procedure for insertion.

How is the Pump Implanted?

The insertion of an implanted intrathecal pump is an outpatient procedure that takes approximately two hours. While the patient is asleep, a catheter is placed in the intrathecal space of the spine and tunneled to the abdomen, where the pump is implanted under the skin.

Patient Selection Criteria

This method of pain control is not for everyone. It is used when other techniques to control pain have failed. This therapy is typically considered when more conservative therapies have failed or when unmanageable side effects accompany oral opioid medication treatment.

Consideration is given to the availability of family support for the patient. An assessment for any underlying psychological or addiction problems is completed prior to any decision to implant. The patient must show a willingness to participate in rehabilitation.

Advantages

The greatest advantage is increased pain control. This is achieved because the medication goes directly to the opioid receptors in the spine. As a result of bypassing the other organs, there is a decrease in the typical opioid medication side-effects, such as sedation, nausea, itching and constipation. Pain relief is also achieved with a much lower dose of medication. The pump typically needs refilling every two to three months and requires a needle stick through the skin into the pump.

This treatment is most effective when combined with other methods to control pain which may include physical therapy, medication management, weight loss, smoking cessation and other recommended interventions.

Disadvantages

The pump, like all mechanical devices, can potentially malfunction. There is also, a possibility for catheter problems such as kinking, dislodging, tearing and fibrosing or scarring.

As the implantation is a surgical procedure the risks include all of the potential risks associated with surgery, including infection, nerve damage and rarely death.