What is a nerve block?

In general terms, a nerve block is a procedure used in the diagnosis and/or treatment of chronic pain mediated by a specific or groups of peripheral nerves. Peripheral nerves, or PNS, are part of the nervous system and include the nerves and neurons that extend outside the brain and spinal cord to innervate the limbs and organs. By injecting a local anesthetic (such as lidocaine etc.) or a steroid in the area of a peripheral nerve, the transmission of pain may temporarily cease and inflammation be reduced. If a series of these injections are given, there may be permanent relief. Blocking sensation in targeted areas of the PNS also helps your physician identify the actual source of your pain for a more accurate diagnosis.

Many different types of nerve blocks are available at Carroll Hospital Center’s Advanced Pain Management Center. Some of them include:

- Occipital nerve blocks for the diagnosis and treatment of chronic headache.
- Brachial/femoral plexus nerve blocks for the diagnosis and treatment of pain stemming from nerve damage to either the hand or arm (brachial) and hip or upper legs (femoral).
- Intercostal nerve blocks for the diagnosis and treatment of pain in the area of the rib cage (upper back, flank or chest) stemming from post-surgical, post-shingles or cancer-related nerve damage.
- Autonomic plexus (including the stellate ganglion, lumbar sympathetic, celiac, and hypogastric nerve) blocks for the diagnosis and treatment of pain in the limbs, internal organs, abdomen and pelvis. Also used to treat hyperhidrosis (excessive sweating).

What happens the day of a nerve block procedure?

Some nerve blocks are performed under light intravenous sedation to make the procedure more tolerable. An anesthesiologist will be on hand to monitor your blood pressure, blood oxygen, heart rate and in some cases, your surface body temperature. You will lie in a comfortable position appropriate to the type of nerve block given. For example, stellate ganglion nerve blocks are administered while lying flat on your back, while celiac plexus blocks are given while lying face down.

Nerve blocks require an injection that penetrates the skin and deep tissues, similar to a tetanus shot. Therefore, a local anesthetia is applied to the injection site. All injections are performed under real time fluoroscopic vision and guidance. The actual injection takes just a few minutes. Intercostal nerve blocks take up to twenty minutes depending on the number of levels being blocked.

Once the injection is given, you may experience a slight tingling or numbness in the target area, temporary weakness, involuntary muscle movements, a feeling of warmth or other sensations. The pain may be gone or greatly reduced. If the injection is successful in reducing pain, your physician may recommend subsequent injections until the pain is either permanently eliminated or significantly reduced.

What happens after the nerve block procedure?

You must arrange to have a ride home. It is advisable to take it easy for one to two days following the procedure. Ice packs applied to the affected area will help lessen the pain at the injection site. Side effects and complications are uncommon. However, if you suspect infection, if there is excessive bleeding or a worsening of symptoms, call your doctor immediately.