Intercostal Nerve Blocks offered at Valley Pain Specialists

Intercostal nerve blocks can be used for a variety of chest wall and upper abdominal wall pain conditions. Acute pain issues such as herpes zoster and rib fractures as well as in more chronic processes such as cancer pain, metastatic lesions of liver, post lung scarring procedures or post herpetic neuralgia.

Intercostal nerves arise from the anterior division of the thoracic paravertebral nerve. The intercostal nerve has four branches: An unmyelinated postganglionic fibers of the gray rami communicantes which interfaces with the sympathetic chain, the posterior cutaneous branch which innervates the muscle and skin around the paraspinal area, the lateral cutaneous division which arises in the anterior axillary line. This provides the majority of the cutaneous sensation of the chest and abdominal wall. Lastly the anterior cutaneous branch, which supplies innervation to the midline of the chest and further areas of the abdominal wall.

Interestingly, this procedure can even be done on patients with coagulopathies or on anti-coagulation therapy (e.g. wafarin, clopidogrel) if using a 25 gauge needle or smaller.

Normally an anesthetic (such as lidocaine or bupivicaine) and a steroid (such as kenalog) are used in combination. The anesthetic provides immediate pain relief, while the steroid attempts to reduce any inflammation that may be leading to impingement of a sensory nerve.

Potential complications and side effects include pneumothorax (less than 1%), introduction of medicines into the intercostal artery and infection at the procedure site.

For chronic pain patients, if the intercostal nerve block provides temporary relief, cryoneurolysis or radiofrequency lesioning may be attempted to provide longer term relief.

For Information and Referrals:
(610) 954-9040