



Medical Review Institute of America, Inc.
America's External Review Network

DATE OF REVIEW: September 30, 2008

IRO Case #:

Description of the services in dispute:

Preauthorization – Left Stellate Ganglion Block

A description of the qualifications for each physician or other health care provider who reviewed the decision

The physician providing this review is board certified in Anesthesiology and is a doctor of Osteopathy. The reviewer is currently an attending physician at a major medical center providing anesthesia and pain management services. The reviewer has participated in undergraduate and graduate research. The reviewer has been in active practice since 1988.

Review Outcome

Upon independent review the reviewer finds that the previous adverse determination/adverse determinations

should be:

Upheld

Provide a description of the review outcome that clearly states whether or not medical necessity exists for each of the health care services in dispute.

Medical necessity does not exist for the requested Left Stellate Ganglion Block.

Patient clinical history [summary]

The patient is a male with traumatic left hand injury in xxxx. The patient had multiple surgeries. He had evidence clinically of CRPS with subjective complaints of pain, swelling, temp changes and hypersensitivity. Most of these were also noted on physical examination. The patient had PT and one pain MD who did 2 stellate ganglion blocks (SGBs) and 2 medial nerve blocks. The first SGB was in 11/07 and it is noted that the patient had a positive temperature response, but no pain relief. He had another surgery and then had another SGB in 5/08

again with positive temp changes but no response. Dr. began treating him in 7/08 and mistakenly stated the patient had SGBs with no temperature monitoring done so he wanted to do them himself. This was denied so in 8/08 he suggested a SCS.

Analysis and explanation of the decision include clinical basis, findings and conclusions used to support the decision.

This patient has longstanding left arm pain and trauma and multiple surgeries. He has clinical evidence of CRPS. He had 2 SGBs in the past, both before and after surgery with no relief. These were technically good blocks, as the patient was noted to have had temperature changes with them. Apparently Dr. did not read the procedure reports. It is not necessary to repeat a dual failed procedure.

A description and the source of the screening criteria or other clinical basis used to make the decision:

ASIPP 2008.

ODG: Recommendations are generally limited to diagnosis and therapy for CRPS. See CRPS, sympathetic and epidural blocks for specific recommendations for treatment. Also see CRPS, diagnostic criteria; CRPS, medications; & CRPS.

Stellate ganglion block (SGB) (Cervicothoracic sympathetic block): There is limited evidence to support this procedure, with most studies reported being case studies. The one prospective double-blind study (of CRPS) was limited to 4 subjects. Anatomy: Sympathetic flow to the head, neck and most of the upper extremities is derived from the upper five to seven thoracic spinal segments. The stellate ganglion is formed by a fusion of the inferior and first thoracic sympathetic ganglia in 80% of patients. In the other 20%, the first thoracic ganglion is labeled the stellate ganglion. The upper extremity may also be innervated by branches for Kuntz's nerves, which may explain inadequate relief of sympathetic related pain. Proposed Indications: This block is proposed for the diagnosis and treatment of sympathetic pain involving the face, head, neck, and upper extremities. Pain: CRPS; Herpes Zoster and post-herpetic neuralgia; Frostbite. Circulatory insufficiency: Traumatic/embolic occlusion; Post-reimplantation; Post-embolic vasospasm; Raynaud's disease; Vasculitis; Scleroderma. Testing for an adequate block: Adequacy of a sympathetic block should be recorded. A Horner's sign (ipsilateral ptosis, miosis, anhidrosis conjunctival engorgement, and warmth of the face) indicates a sympathetic block of the head and face. It does not indicate a sympathetic block of the upper extremity. The latter can be measured by surface temperature difference (an increase in

temperature on the side of the block). Somatic block of the arm should also be ruled out (the incidence of brachial plexus nerve block is ~ 10%).

Complete sympathetic blockade can be measured with the addition of tests of abolition of sweating

and of the sympathogalvanic response. Documentation of motor and/or sensory block should occur. Complications: Incidental recurrent laryngeal nerve block or superior laryngeal nerve block, resulting in hoarseness and subjective shortness of breathe; Brachial plexus block; Intravascular injection; Intrathecal, subdural or epidural injection; Puncture of the pleura with pneumothorax; Bleeding and hematoma. There appears to be a positive correlation between efficacy and how soon therapy is initiated (as studied in patients with CRPS of the hand). Duration of symptoms greater than 16 weeks before the initial SGB and/or a decrease in skin perfusion of 22% between the normal and affected hands adversely affected the efficacy of SGB therapy. (Ackerman, 2006) (Sayson, 2004) (Grabow, 2005) (Colorado, 2006) (Price, 1998) (Day, 2008) (Nader, 2005) See also Stellate ganglion block.