

SYMPATHETICALLY MEDIATED PAIN DISORDERS OF THE LUMBAR SPINE. James Zucherman, MD, J. Dwyer, MD, Ken Hsu, MD, Linda Rasmussen, MD, R. Derby, MD, Jerome Schofferman, MD. St. Mary's Hospital Spine Center, San Francisco, CA.

Sympathetically mediated pain syndromes of the lumbar spine have been observed in patients with back disease primarily, especially those with failed surgery syndrome. A review of the literature reveals one report on this problem in primary association with disorders of the lumbar spine.

A group of 114 patients, who had 188 sympathetic blocks, presented with low back pain and causalgic-like symptoms of the lower extremities. Those patients with burning lower extremity pain, hyperesthesia and/or trophic skin changes as a significant component of their pain underwent sympathetic blocks for evaluation of their disorders, followed by further treatment including oral sympathetic blocking agents, chemical rhizotomies, and surgical sympathectomies. 65% of patients experienced reduction of their extremity pain with sympathetic blockade for some period. 20% of patients improved significantly on oral medications.

Five of 10 patients obtained a period of sustained relief with phenol chemical sympathectomy.

Nine patients eventually underwent surgical lumbar sympathectomy, with 6/9 obtaining lasting significant reduction in their extremity pain.

102 of 114 patients had a history of previously failed lumbar surgery.

Reflex sympathetic dystrophy is a disorder frequently associated with nerve injury. Since many of our patients had failed previous surgery, post-surgical spinal nerve root pathology may be responsible for the initiation of a sympathetic nervous system mediated pain pattern.

Sympathetically mediated pain is not uncommon in chronic back pain syndromes, and can be treated when it is recognized. In some cases it appears to be responsible for most of the patient's discomfort, although it is usually associated with some other painful spinal abnormality.

Treatment strategies including oral alpha blockers and calcium channel blockers, local anesthetic sympathetic block, chemical sympathectomy, and surgical sympathectomy are evaluated in this study and found to be helpful. Even when the primary stimulus in the lumbar spine cannot be corrected, aggressive treatment of sympathetically mediated pain will usually result in significant improvement.