

Abstract:

This case demonstrates facet joint nerve blocks as a treatment modality for patients with post-laminectomy syndrome who have had minimal response to other treatment modalities. While there is insufficient clinical study on the role of this treatment in post-laminectomy syndrome patients, this case showed successful results in treating our patient's pain with facet joint nerve blocks.

Introduction:

Post-laminectomy syndrome is persistent back pain despite spinal surgical intervention and it significantly affects a patient's quality of life. This pain is shown in some studies to be affecting 60% of patients. With such high prevalence and clinically significant pain, many treatment modalities have been utilized to manage this pain. That includes agents that aim to treat neuropathic pain such as duloxetine, gabapentin and celecoxib have proven to be effective in managing chronic post-surgical pain and have been used to treat pain in post-laminectomy syndrome. For patients who do not receive adequate pain relief, however, other treatment modalities need to be used. One alternative treatment is facet joint nerve blocks which may prove to be an intervention that is effective in treating persistent pain. This case shows the role of facet joint nerve blocks in treating persistent pain in patients with post-laminectomy syndrome.

Discussion:

This case is noteworthy because of the persistence of post-laminectomy syndrome more than a year after the initial laminectomy and after multiple treatment modalities were used. The patient was initially treated with Cymbalta, Gabapentin, Ibuprofen, and trigger point injections to manage the pain. Persistent pain warranted two facet joint nerve blocks, which achieved good pain relief. Facet joint nerve blocks in persistent pain from laminectomy have proven to be effective in this case as the patient has had good pain relief from these nerve blocks. Facet joint nerve blocks in clinical studies, however, have had mixed results in terms of effectiveness as a treatment. Some studies have proven facet joint nerve blocks to be effective in other cases of chronic back pain, while other studies have determined that they do not have a therapeutic effect. Due to the mixed results of these studies, further studies are recommended for the effectiveness of treating chronic back pain with facet joint nerve blocks. More studies on facet joint nerve block treatments for persistent post-laminectomy syndrome after medical management is also recommended, as few studies have been done in treating patients with this clinical presentation with facet joint nerve blocks.

Case Report: FACET JOINT NERVE BLOCKS AS A TREATMENT MODALITY FOR PATIENTS WITH POST-LAMINECTOMY SYNDROME

Dr. Akhil Mehta M.D., Aaron Rubenstein, Tishawn Ross, Dr. Amalraj Siva M.D.

Figure 1

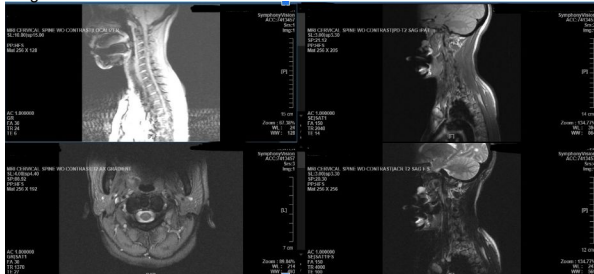
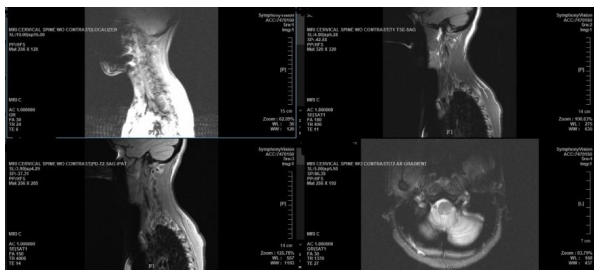


Figure 2



Case Presentation:

A 45 year-old-female with a PMHx of a cervical herniated disc and chronic LBP presented to the ED on 2/9/22 for acute on chronic left-sided neck pain, associated with pain radiating to both arms and new onset right lower extremity numbness.

2/9/22: MRI shows large paracentral disc herniation at C3-C4 compressing the left side of the spinal cord (Figure 1). Neurology diagnosed a large C3-C4 disc herniation with spinal cord compression and partial Brown-Sequard syndrome

2/10/22: Underwent C3-C4 anterior cervical discectomy and decompression of the spinal cord/arthrodesis/insertion of an intervertebral biochemical device. Post-op cervical MRI (figure 2) displayed anterior cervical discectomy and fusion at C3-C4 with the removal of large disc herniation. Continued to have back pain post-surgery, sent to acute IRF - discharged 2/26/22.

8/16/22: Trigger point injection, good pain relief. 9/20/22: Right-sided cervical myofascial trigger point injection, mild pain relief. 10/19/22: Left occipital nerve block with minimal relief. 11/09/22: Left cervical facet joint nerve block on the left C2, C3, C4, and C5, good pain relief.

1/25/23: Presents to the pain management clinic complaining of: Head pain: sharp, aching, non-radiating - 4/10 intensity, worsened by brushing her teeth with no relieving factors. Bilateral neck pain - R>L, harp, aching, non-radiating, and 6/10 intensity. Lower back pain - dull, aching, non-radiating, and 10/10 intensity, which worsened with prolonged sitting or standing attempts. Relieved with medication + PT. Physical examination revealed cervical facet tenderness on the right side, thoracic facet tenderness bilaterally, and ½ strength on the right lower extremity with knee flexion and extension. Post-laminectomy syndrome diagnosis made.

2/15/23: Right cervical facet joint nerve block at C2, C3, and C4 - moderate relief.

4/25/23: L5 to S1 LESI, with renewal of Physical Therapy

6/13/23: Presents with improvement in all of her pain. EMG performed and showed no evidence of cervical or lumbosacral radiculopathy.

Conclusion:

Post-laminectomy syndrome can cause significant pain to patients. While some patients may receive adequate pain relief through medications and trigger point injections, others may require alternative treatment modalities such as facet joint nerve blocks. This case report highlights the effectiveness of facet joint nerve blocks in treating persistent pain from post-laminectomy syndrome.