

Consult #99

Completed Date: 10/08/2018

Doe, John

Height: 6'0" | **Weight:** 180 | **DOB:** 01/01/1980

Diagnosis C3-4 grade 1 spondylolisthesis with C3-4, C4-5, and C5-6 cervical spinal stenosis with cervical spondylotic myelopathy; C6-7 disc degeneration with subtle anterolisthesis

Appropriateness of Prior Work Workup to date has included cervical, thoracic, and lumbar MRI scans which have localized pathology to the cervical spine. Upright and dynamic cervical spine x-rays are currently lacking

Concur with Prior Opinion Concur with Comment (or Modification)

Reasons for Opinion Patient is a 62-year-old gentleman with a 5 month history of diffuse right lower extremity radicular discomfort and associated antalgic gait. He denied having significant neck or low back pain, and currently has no complaints of neck pain or upper extremity radicular pain numbness, paresthesia, weakness, or loss of manual dexterity. Initial lumbar MRI was notable for L3-4 and L4-5 degenerative disc changes with mild to moderate left lateral recess stenosis which would be inconsistent with the patient's right lower extremity radiculopathy. Two epidural steroid injections delivered at the lumbar spine provided no improvement in the patient's right leg symptoms, only further supporting that the degenerative disc changes in the lumbar spine were not the issue accounting for his symptoms. Interestingly, the patient was offered lumbar decompressive surgery despite the non-concordant imaging findings and lack of response to the epidural steroid injections. Patient was then evaluated by a neurosurgeon who noted hyperreflexia and difficulty walking a tandem line and, appropriately suspected underlying myelopathy. A thoracic MRI scan was negative. A cervical MRI scan did, however, demonstrate a subtle C3-4 anterolisthesis with severe C3-4, moderate C4-5, and severe C5-6 cervical spinal stenosis. The MRI also demonstrated signal change within the substance of the spinal cord at the C3-4 level consistent with myelomalacia. Signal change at this level could reflect dynamic instability at the C3-4 motion segment. The neurosurgeon appropriately recommended decompressive surgery in the form of a C3-C6 posterior cervical laminectomy and instrumented fusion. This is felt to be an appropriate way to proceed. I did, however, comment on the existence of inferior junctional C6-7 disc degeneration with the suggestion of a subtle anterolisthesis.

Opinion Continued

My recommendation was that if posterior C3-C6 laminectomies were performed, the posterior cervical fusion should span from C3-C7 to minimize the risk of future inferior C6-7 disc decompensation and need for subsequent extension of the fusion. If there is debate regarding the need to extend the posterior fusion to the C7 level, I have recommended that the patient obtain upright, dynamic, lateral flexion and extension x-rays of the cervical spine to test the integrity of the C6-7 level. I pointed out that the cervical MRI scan was obtained in the recumbent position, which could minimize the existence of the subtle C6-7 anterolisthesis/instability.

Key Images

