

## Herniated Disc vs. Cancer

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### Case History

JM is a 70-year-old white female with a history of a progressive gait abnormality, ongoing for a period of approximately two years. The symptomatology has been gradually and insidiously progressive. Approximately three months ago, the patient had an acute onset of neurological dysfunction on her left side associated with numbness and tingling. Initially, it was thought that she had a stroke.

The patient has subsequently had a progressive gait abnormality. She has undergone evaluation for extracranial carotid artery stenosis, which is not apparent on Doppler evaluation. The patient has undergone further work-up and evaluation, including MRI of the thoracic spine, and additional MRIs of the lumbar and cervical regions.

The patient has a history of carcinoma of the lung and has had a right thoracotomy. She has not had any metastatic disease diagnosed. The patient previously had right lower extremity pain, and underwent a lumbar laminotomy and disc resection of L4-5 last year.

She presents with a complaint of apraxia of the left upper extremity with numbness and progressive loss of strength. She has been dropping objects with her left hand, and is unable to support herself with that hand. The patient is not experiencing any similar symptomatology of the right upper extremity; she has had decreased vision with difficulty focusing her vision; she is having difficulty maintaining her balance and states that she has a "scissors" gait; she has left-sided heaviness.

She presents to my office upon the referral of her daughter, a current chiropractic patient who has referred her to me for alternative discussion for consideration of evaluation of a thoracic disc herniation. Apparently, the patient had been advised that her symptomatology could be curative, dependant upon her undergoing a neurosurgical decompression of a thoracic disc herniation.

On clinical examination, she stands 5'3," weighs 105 pounds, with a pulse rate of 86. She presents in a wheelchair. The patient's gait and balance testing demonstrate severe abnormality of her gait. She is unable to balance. She has a wide-spaced staggering gait.

Motor testing demonstrates diffuse weakness in the lower extremities bilaterally. She doesn't have dramatic upper-extremity weakness. Sensory testing demonstrates a loss of proprioception on the left side. She additionally has left lateral decreased sensation to pinprick, from mid-face down. Straight leg raising to 80 degrees is negative; atrophy is absent.

Range of motion tests of her hips and the joints in the lower extremities does not reproduce pain. The distal vascular exam is normal. Her chiropractic assessment yields joint fixation of the cervical, thoracic vertebrae and pelvis. The cervical paraspinal muscles have an inelastic quality with areas of multiple tender, firmer masses that demonstrate purposeful withdraw on digital examination.

Radiographic imaging studies were not done, as outside studies were available. An MRI of the

thoracic spine demonstrates evidence of a herniation of the nucleus pulposus (HNP) at the T7-8 midline with spinal cord impingement. MRI of the LS spine demonstrates a previous laminectomy; there are diffuse disc bulges and degenerative changes at all levels. MRI of the cervical spine is demonstrates multi-level cervical degenerative changes without evidence of cord impingement.

EMG/NCV demonstrates chronic right L4 radiculopathy with no evidence of upper extremity or cervical radiculopathy.

I had the opportunity to review the MRI of the brain conducted two months prior. I found this to be an interesting study, and noted the radiologist's reading also indicating substantial abnormality in the level of the brainstem or pons. The radiologist reported that this was most consistent with differential diagnosis, including central pontine myelinolysis, or other demyelinating diseases. Of course, this was most significant with the patient's history of lung cancer.

## Discussion

The patient presents with a very interesting, complex, and challenging case. I am in agreement that the patient has evidence of HNP T7-8, and I feel that this demonstrates evidence of spinal cord compression.

I do not feel that the patient's neurological symptomatology involving her left upper extremity and the thoracic disc can explain her apraxia and proprioception deficits. I have told the family that her diagnosis is not clear. I am particularly concerned with the abnormality shown on the MRI of her brain. Additional coronal and sagittal MRI sections may give rise to further neuroradiological consideration.

The patient has the possibility of a brain abnormality related to her lung cancer. Had it not been for the presence of the central pontine lesion, also clearly indicated in the radiologist's report, I might in concurred with the previous neurologist who desired to perform thoracic decompression via one of his orthopedist colleagues. Given the central pontine lesion, I feel this should be treated medically and further confirmed. However, it was the patient's and daughter's specific desire to seek an alternative opinion and not undergo any further surgery. I do not believe the patient should undergo thoracotomy or surgical interpenetration on the thoracic disc at this time, although other opinions may vary. I explained my reasoning to the family and discussed that the scope of practice of a doctor of chiropractic included a drug-free and surgery-free foundation. I also explained the history of chiropractic, and our historical "angel" symbol as the "guardians of health."

I offered the patient a referral to a surgeon who would be more likely to confirm the central pontine lesion and express a surgical opinion as to the immediate need for an HNP T7-8 decompression and fusion. In the interim the family agreed to allow conservative chiropractic management an opportunity to monitor, if not treat, her unilateral symptoms.

The patient and family were seen almost immediately by the neurosurgeon, who agreed with my opinion and advised them to return to their family physician. The neurosurgeon phoned and asked me questions about the training of a doctor of chiropractic. He stated that this case had opened his eyes to the diagnostic skills of my profession.

I continued with this patient and her family, and their family physician, for the next 18 months up until this patient's death from metastatic disease, secondary to primary lung carcinoma. I provided community resources information and referrals with respect to hospices; living wills; home care; social security; meals on wheels; caregiver support; and even church support. The patient was allowed to pass peacefully while at home surrounded by her family. The patient was allowed to

prepare for her passing with dignity. (I continue to treat the patient's family, not only the daughter now, but the brothers, uncles and nephew.)

I received a card from the family the other day that included a eulogy for the patient:

"Don't think this is the end for me,  
Sing joyful praises to the skies,  
Cause my soul has been sent free."

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JULY 2001