

Lowering the Rollator to Raise the Standard of Care: A Case Report

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INTRODUCTION

We present a case of lumbar spinal stenosis with neurogenic claudication in which functional analysis and in-office adjustments helped relieve symptoms that had been refractory to opioid medication

CASE PRESENTATION:

72 year old female with a history of traumatic left leg length discrepancy presented with worsening low back pain and leg heaviness with ambulation over the past 3 months. Patient uses a rollator for ambulation due to leg length discrepancy. Pain was so severe she had gone to the ED and was started on oxycodone 5 mg by her PCP. Gait analysis revealed erect posture with use of rollator due to handlebars being at the upper abdominal level. Given symptoms consistent with spinal stenosis with neurogenic claudication, the patient's rollator handle bars were lowered to greater trochanter level to accentuate flexion of the lumbar spine and referred for physical therapy with an emphasis on William's flexion approach. Patient reported immediate improvement in both pain and leg heaviness with adjustments

FIGURE 1:



T2 weighted MRI of the lumbar spine without contrast revealing lumbar spinal stenosis most prominently distal to L4 vertebral body

DISCUSSION

Neurogenic claudication is seen in older patients with progressive low back, buttock, thigh, or leg pain worsened with standing/walking, yet improved with sitting or leaning forward. Symptoms are often due to spinal canal narrowing after degenerative hypertrophy of the ligamentum flavum, which connects adjacent vertebral arches longitudinally. Relief occurs with flexion due to the flattening of the ligamentum flavum and the enlargement of the spinal canal diameter, referred to as the "shopping cart sign." This case demonstrates how lowering the height of a rollator can take advantage of these principles, and force patients with neurogenic claudication into a flexion posture with walking that improves pain and functional mobility. Functional analysis is an essential step to the management of patients with spinal stenosis and should be utilized alongside therapy, prior to initiating opioids or considering procedural/surgical interventions.

REFERENCES

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