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### INTRODUCTION

- Neurogenic claudication is one of the most commonly diagnosed and treated pathologic spinal conditions, characterized by increased pain with lumbar extension and decreased pain with flexion. Pain may also be exacerbated by ambulation, and relieved by sitting or lying down<sup>[1]</sup>.
- Neurogenic claudication can lead to significant functional disability and decline in quality of life, particularly in elderly patients. With the number of cases of spinal stenosis and neurogenic claudication expected to rise over the next few decades <sup>[2,3]</sup>, it has become essential for clinicians to be able to diagnose and treat this condition.
- We present below a case of neurogenic claudication in a patient with spinal stenosis whose symptoms resolved after hysterectomy.

### **CASE REPORT**

- 76 year old diabetic female followed over a two-year period for chronic lower back pain that was treated conservatively with physical therapy and oral analgesics presented with worsening claudication. She described it as sharp, achy pain radiating to bilateral lower extremities when walking farther than two blocks.
- Physical exam showed tenderness over the lumbar spine, full strength, intact sensation, diminished reflexes and 2+ peripheral pulses. No step-off deformity swelling or erythema noted. Slump, straight leg raise, Patrick's tests were negative bilaterally. Facet hyperloading test was positive bilaterally.
- Initial Lumbar CT and MRI were significant L4-5 moderate central canal stenosis and multilevel facet arthropathy. EMG/ NCS showed axonal sensorimotor peripheral polyneuropathy affecting both lower extremities.
- Prompted by the worsening in patient's symptoms, a repeat lumbar MRI spine found interval worsening of L4-5 central canal stenosis and an incidental large uterine mass confirmed by MRI pelvis as "13  $\times$  9  $\times$  10 cm uterine leiomyoma with internal fatty changes". The patient was referred for surgical removal of the mass.



# NEUROGENIC CLAUDICATION IN A PATIENT WITH LUMBAR SPINAL STENOSIS RESOLVES AFTER HYSTERECTOMY: A CASE REPORT

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T2 weighted sagittal lumbar MRI



T2 weighted sagittal pelvis MRI



### **RADIOLOGIC IMAGING**



Lumbar CT scan without contrast

T2 weighted coronal pelvis MRI

Gray ramus communican

Lumbosacral plexus correlation with the uterus <sup>[4]</sup>

resolution of symptoms.

- neurogenic claudication.
- heal the patient.

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### DISCUSSION

• This patient had a history of lumbar spondylosis, spinal stenosis at L4-5 with associated claudication and classic radiation of pain to both lower extremities, reasonably attributed to the stenosis. Peripheral polyneuropathy was identified on EMG/NCS tests which was consistent with her underlying diabetes. Lumbosacral plexopathy was low on the differential at that point.

• It was not until a second MRI was done that the compressing tumor upon the lumbosacral plexus was revealed. She subsequently underwent total abdominal hysterectomy/ bilateral salpingo-oophorectomy (TAH/BSO) with complete

## CONCLUSIONS

• Lower back pain is one of the most common presentations in a physiatrist's office. Many etiologies can mask the real source of back pain, and the clinician can easily miss a serious underlying condition. In this case, the discovery and removal of a uterine leiomyoma resulted in complete resolution of back pain and

• Clinicians involved in the care of complex patients such as the one described should be thorough with history, physical exam, and diagnostic studies, so as to avoid missing a diagnosis, such as a tumor, in which its removal could greatly

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