Diabetic Radiculoplexus Neuropathy (DRN): Pain Management of a Rare Disease

Calvin W. Wong, MD, Matthew Moynihan, DO
University of Illinois at Chicago | 23rd Annual Pain Medicine Meeting

INTRODUCTION

Diabetic Radiculoplexus Neuropathy (DRN)

- clinically rare condition
- onset: acute to subacute
- presentation: asymmetrical, progressing, diffuse lower extremity pain and weakness, accompanied with muscle wasting, weight loss, areflexia
- often seen with uncontrolled diabetes, but no association between diabetes and disease severity
- complete recovery typically seen with appropriate glycemic control
- self-limiting (in most cases)
- prevalence: approx. 1% of diabetic patients
- common in: males, type II diabetics, age 50+

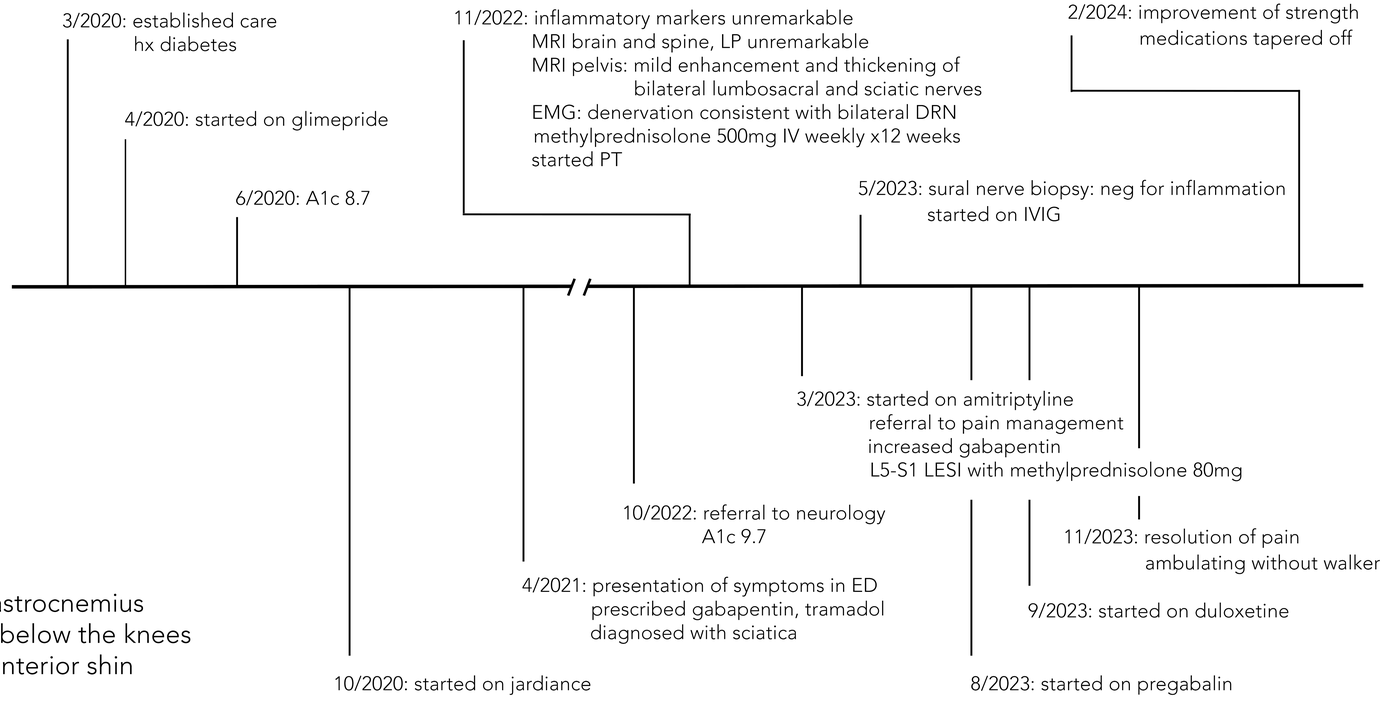
This case discusses diagnostic strategies and pain management considerations for neuropathy associated with DRN.

Exam:

- 4/5 strength of bilateral anterior tibialis and gastrocnemius
- sensory deficits (pressure, vibration, and pain) below the knees
- muscle wasting of left medial thigh and right anterior shin
- use of walker for stabilization

CASE PRESENTATION

We present a 55-year-old male with poorly controlled, non-insulin dependent type II diabetes mellitus and hypertension presenting with bilateral lower extremity numbness, weakness, and neuralgia secondary to diabetic radiculoplexus neuropathy.



After 2 years of ongoing treatment, he eventually experienced complete resolution of weakness and pain.

CONCLUSION

While incidence is rare, DRN is a potentially debilitating disease that often goes unrecognized as it mimics other common pain pathologies. Accordingly, awareness of the disease and its presentation can help pain providers promptly identify the diagnosis, initiate appropriate treatment, and refer patients to other subspecialists as necessary for further assessment and treatment.

Patients should be educated on the severity of disease progression without treatment to paraplegia or quadriplegia with unremitting pain.

It is important to reassure patients of the disease's self-limiting natural history and likely resolution of symptoms.