

# Painless Diabetic Motor Neuropathy

*In this unusual condition, muscle weakness is more prominent than sensory symptoms.*

Diabetes typically causes a symmetric, distal, predominantly sensory neuropathy. Much less common is diabetic amyotrophy, an often asymmetric, relatively acute, painful neuropathy dominated by lower-limb muscle weakness. This condition — also called diabetic lumbosacral radiculoplexus neuropathy (DLRPN) — is thought to reflect ischemic microvascular injury that affects nerve roots and peripheral nerves. Now, Mayo Clinic researchers present 23 diabetic patients (22 with type 2 diabetes) who had a painless variant of this disorder, which they call "painless diabetic motor neuropathy."

Median duration of diabetes was 5 years, but the neurological presentation coincided with a first recognition of diabetes in seven cases. Glycemic control was generally excellent. Most patients exhibited substantial weight loss as their neurological illness evolved. The most common presentation was subacute development of bilateral foot drop, with later involvement of proximal leg muscles and with lesser involvement of upper extremities. Although onset was initially unilateral in one third of cases, involvement usually became bilateral. In contrast, painful DLRPN generally presents unilaterally and more rapidly, with greater involvement of proximal than distal leg muscles. Based on nerve biopsies, nerve conduction studies, electromyography, and clinical characteristics, the authors conclude that painless diabetic motor neuropathy is a variant of painful DLRPN, and not a separate entity.

**Comment:** Although only a small proportion of diabetic patients develop diabetic motor neuropathies, diabetes is so common that primary care clinicians will occasionally encounter these cases. Most patients improve gradually.

— [Allan S. Brett, MD](#)

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