

# Painful legs and moving toes syndrome



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## INTRODUCTION

Painful Legs and Moving Toes (PLMT) syndrome is a rare, frequently misdiagnosed movement disorder defined by the coexistence of chronic neuropathic pain typically diffuse in the lower limbs and choreiform toe movements<sup>1</sup>. Its pathogenesis is multifactorial, involving altered nociceptive input, maladaptive spinal interneuron activity<sup>2</sup>, sympathetic system contributions, and central nervous reorganization, leading to aberrant efferent motor output<sup>3</sup>.

## CASE REPORT

We report on a 59-year-old woman with longlasting bipolar spectrum disorder, who underwent long-term treatment with neuroleptics (haloperidol, aripiprazole and clozapine) and had previously developed tardive oromandibular and tongue dyskinesia, partially responsive to tetrabenazine. In late 2024 dyskinesias were associated to an acute onset of subcontinuous involuntary bilateral choreiform movements of the toes associated with intermittent pain arising from the toes. These symptoms led to hospitalization in March 2025, where neurological examination revealed platysmal dystonia, mild akathisia, speech-induced oromandibular and tongue dystonia, associated to bilateral choreiform toe movements. Brain and spine MRI, as well as neurophysiological studies, excluded both compressive or peripheral lesions.

The core clinical features supported a diagnosis of PLMT and a multifactorial pathogenesis was hypothesized, potentially involving neuroleptic-induced altered plasticity. Increasing the dose of tetrabenazine and initiating gabapentin (300 mg TID)<sup>4</sup> led to clear improvement in both pain and motor symptoms, with no side effects. PLMT remains a clinical diagnosis of exclusion; this case reinforces the potential role of drug-induced factors in its pathophysiology. The therapeutic response supports the utility of combined GABAergic and monoamine-depleting therapy in selected PLMT cases.

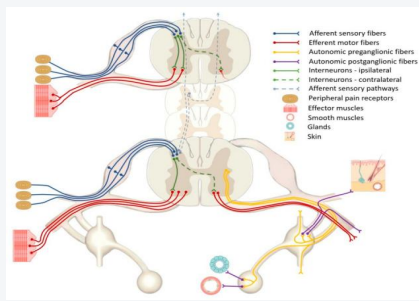


Fig. 1. Leading pathogenetic mechanisms of PLMT<sup>3</sup>

Differential Diagnosis of Painful Legs and Moving Toes (PLMT) Syndrome	
Conditions Presenting with Chronic Pain Syndrome	Conditions Presenting with Involuntary Movements
Radiculopathy	Restless leg syndrome (RLS)
Plexopathy	Chorea
Polyneuropathy	Myoclonus
Disc herniation	Dystonia
Spinal cord stenosis	Parkinson's Disease (PD)
Spinal tumor	Akathisia with leg involvement
Spinal injury	Periodic-limb-movement disorder (PLMD)
Cramps	Epilepsia partialis continua (EPC)
	Functional movement disorders (FMD)

Fig. 2. Differential Diagnosis of PLMT<sup>3</sup>

## DISCUSSION

PLMT should be considered in patients with persistent toe movements and neuropathic leg pain, even in the absence of structural findings. Early recognition and personalized pharmacologic such as gabapentin and tetrabenazine may offer a viable therapeutic approach in selected cases, improving patient quality of life.



## REFERENCES

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