

Persistent Post-COVID Small Fiber Neuropathy With Refractory Allodynia Successfully Managed With THC Oil: A Medically Challenging Case

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Introduction

Small fiber neuropathy (SFN) is an increasingly recognized complication following COVID-19 infection, often presenting with burning pain, paresthesia, and mechanical allodynia in the absence of large-fiber findings. The mechanism is thought to involve immune-mediated injury to small unmyelinated C and A-delta fibers.

Standard pharmacologic agents for neuropathic pain—gabapentinoids, tricyclic antidepressants, and SNRIs—may fail to provide adequate symptom relief, necessitating alternative therapeutic approaches such as cannabinoids, which modulate nociceptive pathways through CB1 and CB2 receptors.

Materials and Methods

Informed consent was obtained from the patient.

Results/Case Report

A 40-year-old female developed severe bilateral lower extremity allodynia approximately four months after recovery from symptomatic COVID-19 infection. The patient was evaluated and followed by neurology for persistent neuropathic symptoms following COVID-19 infection. She described intense “pins-and-needles” discomfort and uneasiness triggered by light touch, particularly when bedsheets or clothing contacted her legs.

Neurological evaluation confirmed small fiber neuropathy based on abnormal thermal threshold testing, with electromyography (EMG) findings consistent with mild polyneuropathy of the bilateral lower extremities. MRI spine imaging was negative for demyelinating or compressive etiologies. Sequential pharmacologic management included amitriptyline, venlafaxine, gabapentin, and pregabalin (Lyrica) titrated to maximal tolerated doses, with limited relief.

The patient subsequently initiated oral THC oil under medical supervision, titrated gradually to achieve symptom control. Within several weeks, she reported marked reduction in allodynia, improved sleep, and the ability to resume full activities of daily living (ADLs). At three-month follow-up, she remained stable without adverse cognitive or systemic effects.

Discussion

This case highlights the potential role of cannabinoid-based therapy in managing refractory post-COVID small fiber neuropathy, especially when conventional agents fail. THC’s modulation of endocannabinoid pathways may dampen central sensitization and peripheral nociception.

While anecdotal, this case underscores the need for prospective studies examining cannabinoids as adjunctive therapy in post-viral neuropathic pain syndromes. Clinicians should consider an individualized, multimodal approach balancing efficacy, tolerability, and functional recovery.

References

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