

Neuropathic Pruritus Relieved by Epidural Steroid Injection: A Case Report

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INTRODUCTION

Neuropathic pruritus, including conditions such as notalgia paresthetica (NP), is characterized by chronic itching without an identifiable dermatological cause. NP often arises from posterior rami nerve involvement and is associated with degenerative spine changes. This case highlights the successful management of severe neuropathic pruritus in a 93-year-old male using a combination of dermatological, pharmacological, and interventional therapies.

CASE REPORT

A 93-year-old male presented with a three-year history of severe, intermittent pruritus localized to the upper and lower back, predominantly on the left side. Symptoms were worse at night, disrupting sleep and quality of life. He denied pain, sensitivity, bowel or bladder dysfunction, or saddle anesthesia.

The patient was initially treated by dermatology for presumed seborrheic keratoses or xerosis using topical steroids, moisturizers, and dupilumab, but these treatments were ineffective. Dermatology later attributed the pruritus to a previous back injury from a roller-skating incident, suggesting a neuropathic origin. After unsuccessful trials of neuropathic agents, including gabapentin, the patient was referred for interventional pain management.

Imaging revealed lumbar spondylosis, including moderate degenerative changes at L4-5 and L5-S1. Based on symptom localization and imaging findings, the patient was diagnosed with NP. Treatment included a multimodal regimen of low-dose naltrexone, capsaicin cream, and an L2-3 interlaminar epidural steroid injection (LESI).



THIS CASE HIGHLIGHTS THE SUCCESSFUL MANAGEMENT OF SEVERE NEUROPATHIC PRURITUS IN A 93-YEAR-OLD MALE USING A COMBINATION OF DERMATOLOGICAL, PHARMACOLOGICAL, AND INTERVENTIONAL THERAPIES.

Needle Placement and Contrast Spread During LESI

Anterior-posterior with AP fluoroscopic view demonstrating needle placement at the L2-3 interlaminar space with contrast spread confirming epidural entry during the lumbar epidural steroid injection (LESI).

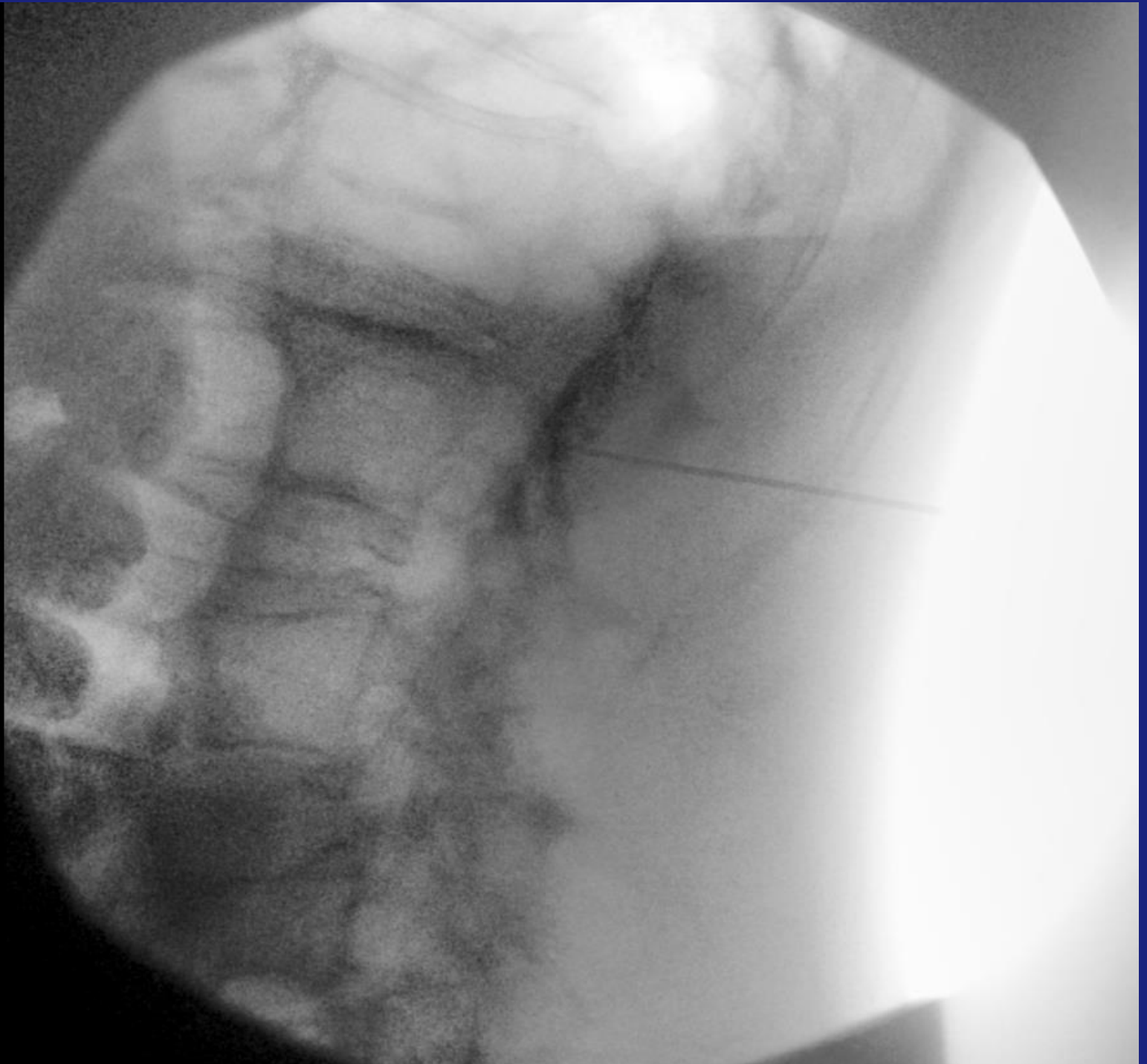


Lumbar Spine X-Ray Demonstrating Spondylosis

X-ray imaging of the lumbar spine showing degenerative changes consistent with lumbar spondylosis, including disc space narrowing, marginal osteophytes, and facet joint arthrosis, most prominent at L4-5 and L5-S1.

Lateral View of Needle Placement During LESI

Lateral fluoroscopic view confirming accurate needle placement at the L2-3 interlaminar space during the lumbar epidural steroid injection (LESI).



RESULTS

The initial L2-3 LESI provided 100% relief of itching for six months, with significant improvements in sleep and energy levels. Symptoms returned after six months, prompting a repeat LESI with similar outcomes. Adjunct therapies, including gabapentin and low-dose naltrexone, provided sustained symptom relief with minimal side effects. The patient reported a significant overall improvement in quality of life.

DISCUSSION

This case demonstrates the importance of a comprehensive and interdisciplinary approach in managing refractory neuropathic pruritus. Although dermatological treatments addressed potential primary skin conditions, the lack of response and history of a back injury highlighted a neuropathic etiology.

There are currently no widely published studies directly addressing the treatment of NP with epidural injections. This case report introduces a novel application of interventional pain management techniques, suggesting that epidural steroid injections may alleviate nerve root inflammation and improve symptoms in NP.

The marked response to epidural steroid injections underscores the role of targeted anti-inflammatory interventions in managing nerve root irritation. Additionally, the integration of dermatological insights into diagnosis and treatment highlights the importance of interdisciplinary collaboration in achieving optimal outcomes. Further studies are warranted to explore this treatment modality in NP.

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