

A Change of Face: Resolution of Facial Dysesthesia after Cervical Epidural Steroid Injection

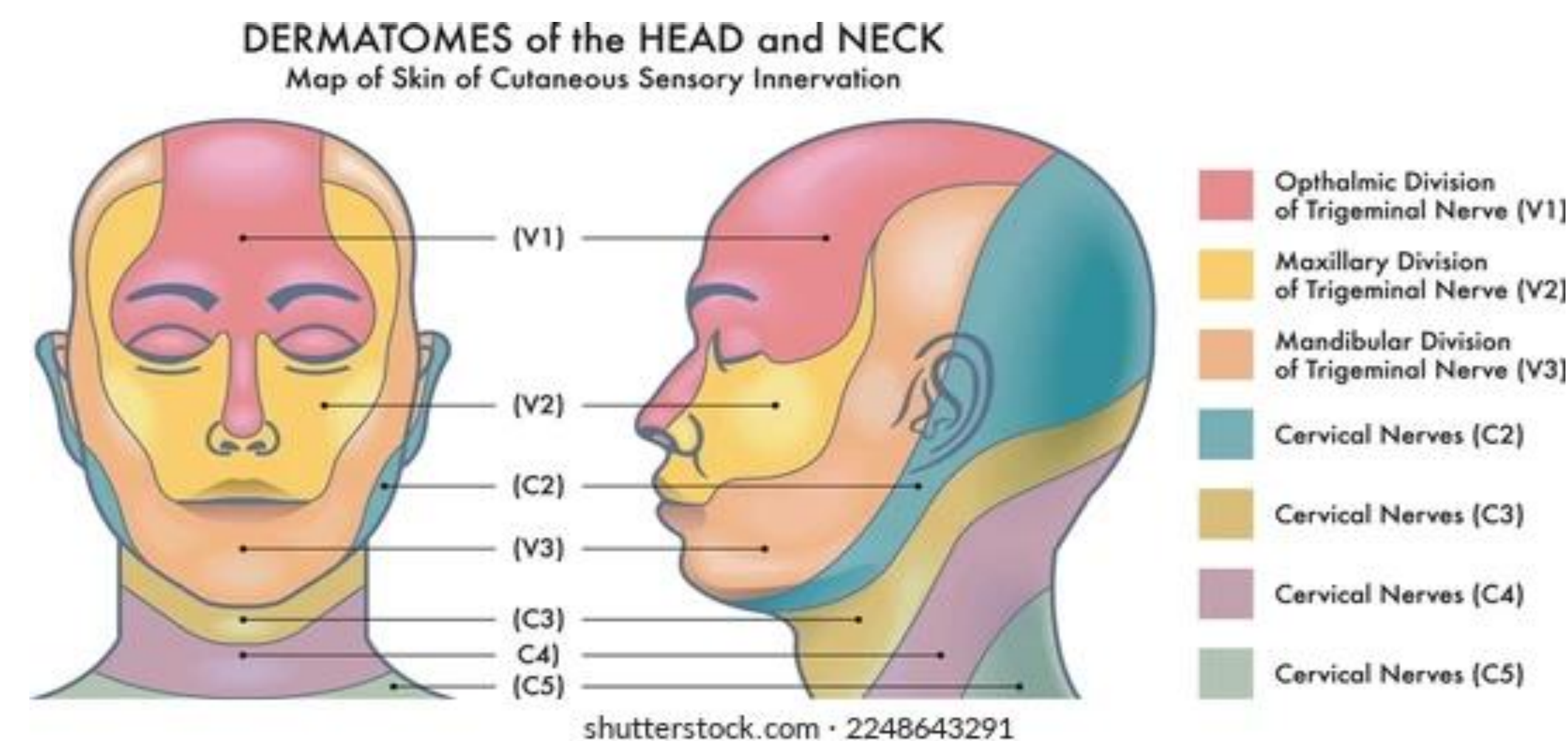
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INTRODUCTION

Facial dysesthesia refers to abnormal sensations including numbness, tingling, or pain affecting the face. It typically arises from issues with nerve damage or irritation, which can be multifactorial and includes trigeminal neuralgia and cervical radiculopathy. While cervical epidural steroid injections (CESI) are commonly used to treat radiculopathy, to our knowledge, there are no prior reports specifically demonstrating their use to treat or incidentally resolve facial dysesthesia. This case represents a novel finding demonstrating the latter.

METHODS

Patient informed consent was obtained for submission of a case report. The patient's medical history, imaging studies, and laboratory studies were reviewed retrospectively using the Epic electronic medical record system. A C7-T1 CESI was performed to treat her cervical radiculopathy and NRS scores were used to assess effectiveness. Follow-up assessment was performed at 4 weeks and 8 weeks post-procedure to evaluate the long-term effects on pain relief and facial dysesthesia resolution.



Medical diagram: Dermatomes of the head and neck. (n.d.). Shutterstock.
<https://www.shutterstock.com/image-vector/medical-diagram-dermatomes-head-neck-260nw-2248643291>

RESULTS

The patient initially presented with bilateral neck pain radiating into both upper extremities with associated left upper extremity heaviness, numbness, and tingling that started after being struck from behind by a motor vehicle while riding her bicycle. Despite MRI cervical spine findings demonstrating moderate C5-C6 spinal stenosis and moderate bilateral neuroforaminal stenosis at this level, she also reported left-sided jaw numbness and tingling in a V3 nerve distribution, prompting a potential diagnosis of idiopathic trigeminal neuralgia among a wide differential diagnosis, including multiple sclerosis. Interestingly, her symptoms worsened during routine blood pressure cuff inflation in clinic. This prompted additional lab work, including electrolyte panel, and normal lab results ruled out metabolic causes for her symptoms. The patient underwent C7-T1 interlaminar epidural steroid injection to address her cervical radiculopathy with 50% relief of neck pain and upper extremity pain. Notably, her left-sided facial dysesthesia completely resolved after the procedure, which was sustained at 4-week follow-up and 8-week follow-up. The patient reported no recurrence of facial numbness or tingling during follow-up, indicating the significant therapeutic impact of cervical epidural steroid injection on her facial symptoms.

IMAGING



Figure 1: MRI of cervical spine T2 sagittal



Figure 2: Intraoperative fluoroscopy of cervical spine interlaminar epidural steroid injection

DISCUSSION

This case highlights the potential benefit of epidural steroid injections in patients with both cervical spine pathology and overlapping facial dysesthesia. The resolution of left sided facial numbness and tingling suggests that the CESI may have targeted an overlapping pathophysiology involving the upper cervical nerve roots or trigeminal nerve synapse convergence. This case contributes to the understanding of complex pain presentations and supports the efficacy of interlaminar epidural steroid injections in management of multifocal neuropathic symptoms.

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