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Burning mouth syndrome: concurrent use of trigeminal and sphenopalatine rhizotomy

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Introduction

Burning Mouth Syndrome (BMS) is neuropathic pain resulting from injury or pathology affecting the peripheral or central somatosensory system. Its symptoms include intraoral burning, and it is important to rule out other conditions with similar manifestations. This pain may be localized to the tongue or its tip and may be related to dysesthesia, taste dysfunction, and the sensation of dry mouth. It can be episodic or continuous with variable duration, typically resembling an electric shock in the former case and a burning sensation in the latter. It predominantly affects postmenopausal women, and studies suggest that sensory neuropathy of the small fibers of the trigeminal nerve - ophthalmic (V1), maxillary (V2) and mandibular (V3) - is implicated in BMS.

Objective

To demonstrate the effectiveness of treatment with trigeminal rhizotomy in the V2 and V3 territories combined with sphenopalatine ganglion block in reducing chronic neuropathic pain in the oral cavity.

Case Report

Female patient, 55 years old, presented with a history of burning pain in the tongue and oral mucosa for two years. The pain occurred daily, lasting approximately 6 to 8 hours, without significant improvement with any medication. Clinical examination revealed no changes in the oral cavity. The patient underwent trigeminal rhizotomy in the V2 and V3 territories and sphenopalatine ganglion block, resulting in a 70% improvement in pain and an improvement in quality of life, which was maintained during six months of follow-up.

Conclusion

The combination of trigeminal rhizotomy in the V2 and V3 territories concurrently with sphenopalatine ganglion block appears to be effective in reducing chronic neuropathic pain in the oral cavity. Once other diseases or conditions of the oral mucosa related to mouth pain have been excluded and BMS has been diagnosed, the implemented therapy proves to be an effective approach in treating these patients refractory to drug treatment.

