

Decompression of Inferior Alveolar Nerve: Case Report Comment

Abstract

Paresthesia as a result of mechanical trauma is one of the most frequent sensory disturbances of the inferior alveolar nerve. This case report describes surgical treatment for paresthesia caused by a compressive phenomenon within the mandibular canal. The cause of the compression, a broken instrument left in the patient's mouth during previous endodontic therapy, was identified during routine radiography and computed tomography. Once the foreign object was removed by surgery, the paresthesia resolved quickly. This case highlights the potential for an iatrogenic mechanical cause of paresthesia.

Comment :

The article by Marques and Gomes (J Can Dent Assoc 2011;77:b34) caught my attention. For your information, there is almost an almost similar case reported recently, but with dysesthesia.¹ It is fortunate that the patient in the current case has less severe symptoms (occasional numbness of her left lip and a small part of her chin, and a tingling sensation in the vestibular gingival).

What I can deduce from the radiographs shown is that the file was actually lodged onto the wall of the periapical defect and the mandibular canal, and because of this the inferior alveolar nerve (IAN) was spared direct injury. Ikeda et al.² had shown that there is room between the IAN and the canal. However, as reported by the Marques and Gomes, her symptoms were more aggravated in the morning and during stressful situations. This may be a result of fluid accumulation in the morning, or during any sympathetic (stressful) event, that may result in vasodilatation, and hence compression within the narrow mandibular canal that usually average $3.4 + 0.5$ mm in diameter. ^{2,3}

I hope this opinion is of help. Thank you.

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