

# An uncommon cause of isolated hypoglossal nerve palsy: a case report

## Précis

A rare case of isolated hypoglossal nerve palsy observed clinically as tongue deviation, and diagnosed by MRI identification of a meningioma in the hypoglossal canal.

## Abstract

**Introduction:** Isolated hypoglossal nerve (CNXII) palsy is rare due to the course of the nerve and its close proximity to other cranial nerves and vessels. Aetiology includes space-occupying lesions, head and neck trauma, and infections. Characteristically, hypoglossal nerve palsy presents with unilateral atrophy of tongue musculature and deviation of the tongue to the affected side.

**Case report:** A 50-year-old woman attended Belfast Dental Hospital complaining of tenderness and swelling of the left side of her tongue for the previous eight weeks. Her medical history was unremarkable and she was a non-smoker. On examination, there was no evidence of lymphadenopathy, asymmetry or swelling. Cranial nerves (CN) I-XI were intact; however, testing of CNXII revealed fasciculation and deviation of the tongue to the left on protrusion. A magnetic resonance imaging (MRI) scan revealed a lesion in the left hypoglossal canal, in keeping with a meningioma. The patient has now been referred to neurology, awaiting the possibility of neurosurgery.

**Discussion:** Hypoglossal nerve palsy is uncommon and rarely presents in isolation. It raises suspicion of a sinister underlying pathology and therefore a prompt referral for an MRI scan was made. Meningiomas arising in the hypoglossal canal are extremely rare and this is the fourth case to be reported in the literature.

**Conclusion:** Isolated hypoglossal nerve palsy can present in any clinical situation, either as a complaint or incidental finding. It highlights the importance of detecting subtle intraoral clinical changes, the use of appropriate imaging, and the importance of multidisciplinary teamwork in diagnosis and management of complex cases.

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# Case report: Management of an impacted second premolar

## Précis

This paper describes the prevalence, aetiology, and management of impacted second premolars in relation to the current evidence.

## Abstract

Impaction of mandibular second premolar teeth may result from local factors such as abnormal positioning of the tooth bud and insufficient space in the dental arch. It can also be caused by ankylosis, early exfoliation, or prolonged retention of the primary second molars. Pathological factors such as alveolar cysts or odontomes have also been implicated. The recommended treatment for these cases varies according to case-specific clinical characteristics. This may include periodic observation, space maintenance, or surgical exposure with/without orthodontic traction or extraction. In this paper, the aetiology, diagnosis and treatment planning for mandibular second premolar impaction are reviewed. Furthermore, the treatment of one case will be presented.

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