Hypoglossal Nerve Palsy of Unknown Cause: Case Report and Literature Review

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Abstract (300 word limit)

Introduction: Hypoglossal nerve palsy (HNP) is rare, and presents as deviation of the tongue to the affected side on protrusion, often alongside wasting and fasciculation of tongue musculature1.

Objectives: To discuss a 66-year-old female with an incidental finding of HNP, and review the literature and differential diagnoses.

Methods: The patient complained of left sided facial pain, displaying symptoms of myofascial pain in the muscles of mastication, and conservative advice was given. Further examination revealed deviation of the tongue to the left on protrusion and a sinister diagnosis could not be excluded. Magnetic Resonance Imaging (MRI) of the head, neck and internal acoustic meatus revealed no abnormality in the medulla or hypoglossal canal or nerve pathway. The patient was referred to the Ear, Nose and Throat department where she underwent nasal endoscopic examination which revealed mild thickening of the posterior lingual tissues but no suspicious features or obvious causes for HNP. A literature search was undertaken to review the differential diagnoses for HNP: four case-series were compared, totaling 361 cases2-5.

Results: No cause for the nerve palsy has been identified; the patient will be reviewed routinely. Differential diagnoses include: tumours such as squamous cell carcinoma, chordoma and glioma(34%), iatrogenic(21%), idiopathic(11%) and rarely multiple sclerosis, stroke, inflammation, and tubercular meningitis2-5.

Conclusion: HNP is the abnormality of imbalanced action of the genioglossus muscles leading to tongue deviation towards the weak side on protrusion. There are a wide number of differential diagnoses for HNP reported, the most common being neoplasm, iatrogenic damage and idiopathic.

Image



Recent Publications

1. Wade. L, Hampton, N. 2021. Treatment of Microcystic Adnexal Carcinoma in a 52-year-old female patient during the COVID-19 Pandemic. Journal of One Day Surgery, 31 (2)

Biography (150 word limit)

Laura Wade is a UK Dentist. Graduating from the university of Newcastle-upon-Tyne in 2019 with an Honours level Bachelor of Dental Surgery, she is now undertaking a hospital training post (Dental Core Training Level 2) in Oral and Maxillofacial Surgery at Liverpool University Dental Hospital, following her year at Morecambe Bay Hospitals Trust (Dental Core Training Level 1). Prior to this, she completed her foundation year in General Dental Practice in Manchester, UK. She is hoping to pursue a career in Oral surgery.

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Track name: 5 - Tongue

Notes/Comments:

This poster has also been entered into the British Dental Association Dental Core Training Poster Competition.