

[ PICTURES IN CLINICAL MEDICINE ]

## Unilateral Hypoglossal Nerve Palsy: A Hidden Tumor

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**Key words:** hypoglossal nerve, cystic tumor, thin section, MRI

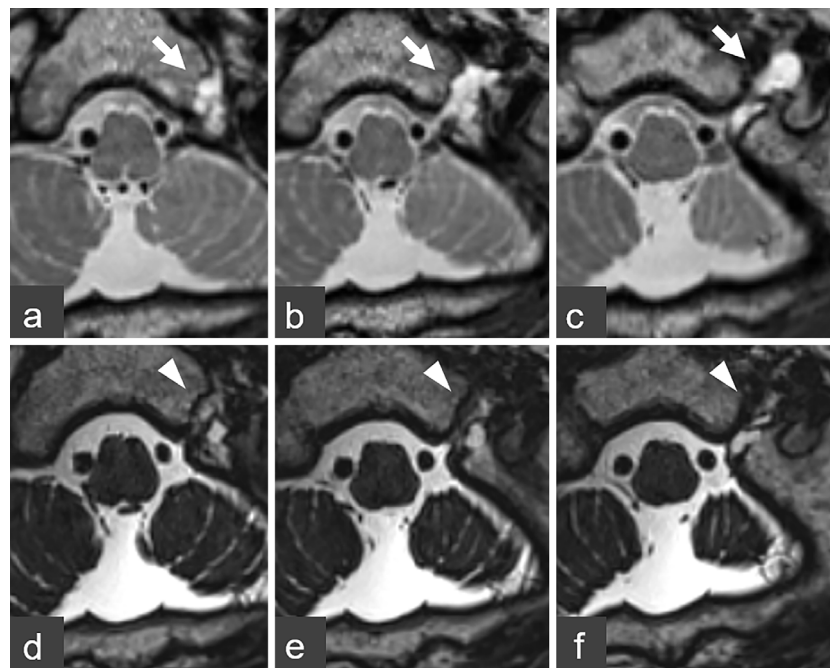
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**Picture 1.**

The patient was a 74-year-old woman who developed dysarthria and tongue deviation three years prior to consultation. Conventional brain magnetic resonance imaging (MRI) was performed, but did not disclose any abnormalities. A neurological examination revealed remarkable muscle atrophy and fasciculation on the left side of the tongue (Picture 1). Neurogenic change on an electromyogram was localized to the left side of the tongue, which indicated left lower hypoglossal nerve palsy. In addition to conventional MRI, thin-section (0.7 mm slice) MRI was performed, which showed a small lesion in the hypoglossal nerve tunnel (Picture 2a-c, arrow). This lesion contained a high intensity mass on T2-weighted imaging, indicating a diagnosis of cystic tumor. The size of the lesion gradually decreased without surgery over the next four years (Picture 2d-f, arrowhead).



**Picture 2.**

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Hypoglossal nerve tumors are relatively rare and are diagnostically challenging, especially in cases involving minor tumors (1, 2). Our case demonstrated that a thin-section analysis can sometimes solve the diagnostic mystery.

**The authors state that they have no Conflict of Interest (COI).**

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