# Teaching Video NeuroImages: Tongue myokymia in hypoglossal neuropathy

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A 50-year-old woman presented with painless dysphagia and dysarthria. There was no radiation exposure. Examination revealed involuntary tongue movements and reduced bulk with deviation to the right on protrusion. The remaining neurologic examination was normal. MRI brain/skull base with contrast was normal.

Ultrasound examination before EMG demonstrated abnormal tongue movement along with the sonographic anatomy of the submental muscles and tongue (video 1).[1] Ultrasound allows for dynamic assessment of the tongue, which is otherwise impossible with other imaging techniques.[2] Right genioglossus EMG confirmed myokymia and sparse fasciculations with background chronic neurogenic motor unit rearrangement and reduced recruitment.

The diagnosis was chronic idiopathic hypoglossal neuropathy with clinical remission but subsequent deterioration due to the development of nerve hyperexcitability.

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## Author contributions

T.C. Wee: drafting/revising the manuscript, data acquisition, study concept or design, accepts responsibility for conduct of research and final approval. R. Markus: drafting/revising the manuscript, data acquisition, analysis or interpretation of data, accepts responsibility for conduct of research and final approval. N.G. Simon: drafting/revising the manuscript, data acquisition, study concept or design, analysis or interpretation of data, accepts responsibility for conduct of research and final approval, acquisition of data, study supervision.

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## Disclosure

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

## References

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