



Visual Diagnosis

A Quiver of the Chin

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This 12-year-old boy presented with a one-year history of involuntary, painless twitching of the chin and lower lip (see [Video](#)). Speech and awareness were unaffected and there was no associated movement of the eyes, limbs, or head. The episodes lasted less than five minutes, triggered by stress and anxiety. Nine family members across four generations were affected. His neurological examination was otherwise normal.

Hereditary geniospasm is a rare autosomal dominant condition with incomplete penetrance. It produces paroxysms of involuntary rhythmic contractions of the mentalis muscle bilaterally, which cannot be suppressed. Episodes typically last between seconds and hours, interfering little with function but causing embarrassment, for which patients most commonly present. Tremor typically develops in childhood, peaks in early adulthood, and resolves by the fifth decade. No single gene has been elucidated for hereditary geniospasm. A locus on the proximal long arm of chromosome 9 (9q13-q21) has been identified; however, this has not been confirmed in other reports.¹ Why only the mentalis muscle is affected is not known.

Although benign, chin trembling is a source of embarrassment. Injection of low-dose botulinum toxin into the mentalis muscle or low dose clonazepam are sometimes helpful.² No treatment was commenced in our patient. Although rare, it is important to recognize hereditary geniospasm in order to avoid unnecessary investigations.

Patient video

The video of this child can be found online at <https://doi.org/10.1016/j.pediatrneurol.2019.04.022>.

References

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