

Lip Tremor in Hypocalcemia

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J Neurosci Rural Pract 2020;11:212–213

Neuromuscular hyperexcitability (NH) resulting from hypocalcemia commonly manifests as facial twitching and perioral tingling.¹ Lip tremor in hypocalcemia has never been reported to the best of our knowledge. We report a postpartum female, with two previous miscarriages, presenting with seizures and lip tremor and diagnosed with hypocalcemia.

A 23-year-old woman, 5 days postpartum with past history of two second-trimester miscarriages presented with new-onset generalized tonic-clonic seizures and lip tremor without fever, headache, or vomiting. Trousseau's and Chvostek's signs were positive, and neurological examination revealed a rhythmic, 8 to 10 Hz tremor involving upper lip (▶**Video 1**). Computed tomography of the brain revealed bilateral basal ganglia, thalamus, subcortical white matter, red, and dentate nuclei calcification (▶**Fig. 1**). Electroencephalogram was nonconclusive. Blood work-up revealed reduced calcium of 1.37 mmol/L (normal, 2.14–2.56), raised phosphate of 8.22 mg/dL (normal, 3–4.5), reduced parathyroid hormone of 4 pg/mL (normal, 12–88), and vitamin D of 9.55 ng/mL (normal, 10–55), thereby suggesting a diagnosis of idiopathic hypoparathyroidism. Gynecological and hematological investigations including anticardiolipin

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Video 1

Video of our case shows positive Trousseau's and Chvostek's sign with upper lip tremor at presentation. The second segment of the video taken at 4 weeks after starting treatment shows absent Trousseau's and Chvostek's sign with no upper lip tremor. Online content including video sequences viewable at: <https://www.thieme-connect.com/products/ejournals/html/10.1055/s-0039-3399480>.

antibodies returned nonconclusive. We treated her initially with intravenous calcium gluconate followed by oral elemental calcium 2 g/d and calcitriol 1.5 g/d. Her symptoms including lip tremor subsided over subsequent 4 weeks (▶**Video 1**).

Hypocalcemia is common in pregnancy, mostly due to hypoparathyroidism and dietary deficiency.² Long-standing idiopathic hypoparathyroidism was the cause in our case. NH resulting from reduced extracellular calcium modulates various receptors and ion channels,³ commonly manifesting as muscle spasms, cramps, twitchings, paresthesia, numbness, and seizure.¹ Lip tremor in our case appears related to NH.

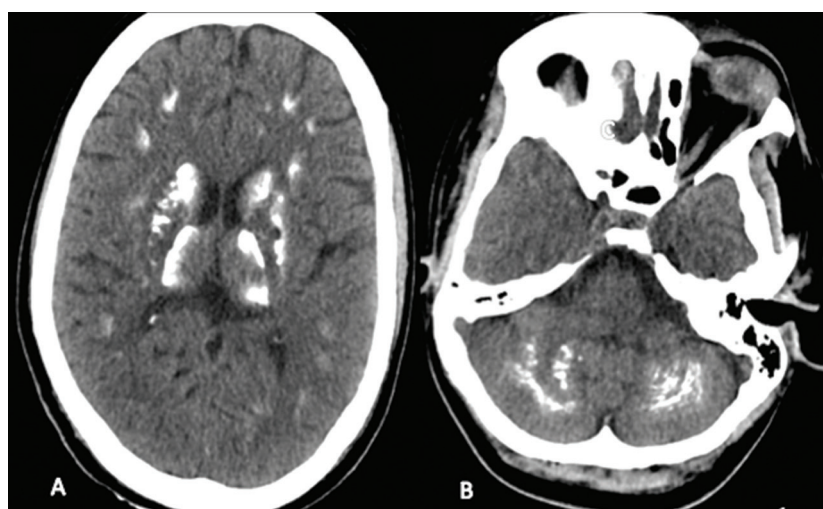


Fig. 1 Noncontrast computed tomography of the brain showing calcifications in bilateral basal ganglia, thalamus, and subcortical white matter (A) and cerebellum (B).

NH may increase uterine irritability leading to miscarriages,⁴ as reported by our case. Nearly 30 g of calcium is transferred from mother to the fetus throughout pregnancy with maximum in the last trimester.^{2,4} Thus, long-standing hypocalcemia in pregnancy is more likely to manifest in the peripartum period as evidenced in our case. Asymptomatic hypocalcemia in pregnancy is widely prevalent in India,⁵ and regular monitoring of serum calcium and a calcium-rich diet in pregnancy is essential.

Authors' Contributions

N.K.: Conception, design, writing the first article, review, and critique. V.P.: Review and critique.

Funding

None.

Conflict of Interest

None declared.

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