

## CLINICAL PRACTICE

## Clinical Images

## Diabetic Chorea



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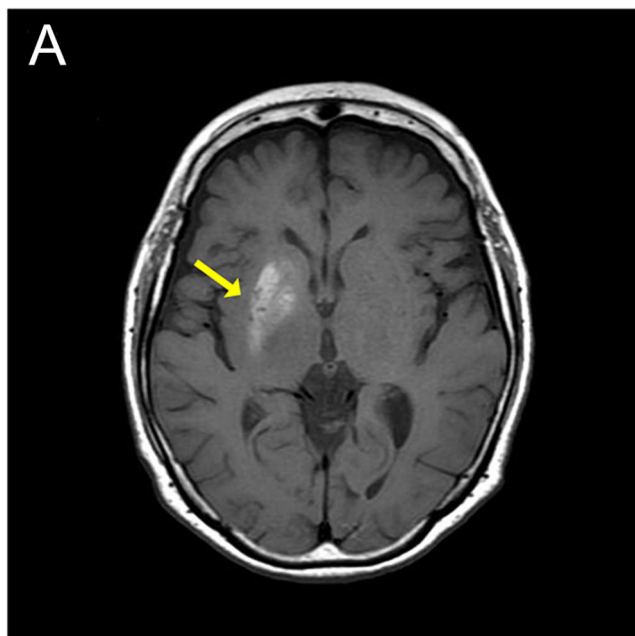
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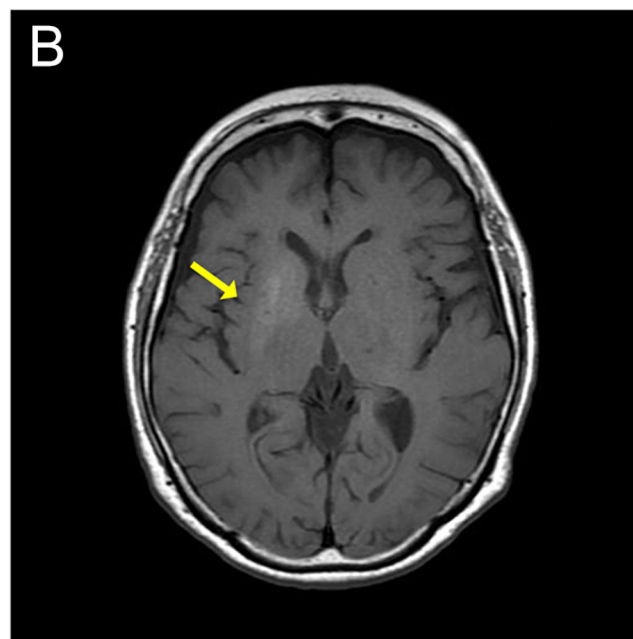
A 69-year-old woman with type 2 diabetes was lost to follow-up and stopped taking her insulin 1 year previously. She presented with rapid-onset, uncontrolled, twisting, chorea-form motions of her left arm and leg. Magnetic resonance imaging (MRI) showed high signal intensity in the right (contralateral) basal ganglia on T1-weighted imaging (Fig. 1). Laboratory tests demonstrated a HbA1c concentration of 15.1%. A presumptive diagnosis of diabetic chorea was made. She was treated with insulin for glucose control with resolution of chorea. She remained

symptom free, and repeat MRI showed marked improvement (Fig. 2) 5 months later.

Diabetic chorea is a rare entity. The precise prevalence rate is unknown. There is a slight female predominance and is more commonly recognized in Asian women.<sup>1</sup> The mechanism remains unclear, but transient incomplete ischemia due to hyperglycemia of brain cells has been proposed as a possible cause.<sup>2</sup> Glycemic control and anti-chorea medications such as haloperidol are used for the treatment of this disease with a reported success rate of 25.6% and 55.8%, respectively.<sup>3</sup> However, some patients develop recurrence even after such chorea treatments.<sup>3</sup> Early recognition of the cause of chorea is important to prevent improper therapy.



**Fig. 1.** Magnetic resonance imaging showing high signal intensity (arrow) in the right basal ganglia on T1-weighted imaging in a woman with poorly controlled diabetes and diabetic chorea.



**Fig. 2.** Magnetic resonance imaging showing improvement of the high signal intensity (arrow) after improvement of glycemic control.

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**Declarations:**

**Conflict of interest:** The authors declare that they do not have a conflict of interest.

**Patient Consent:** Written informed consent was obtained from the patient to publish this case report.

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