Chorea, Hyperglycemia, Basal Ganglia Syndrome

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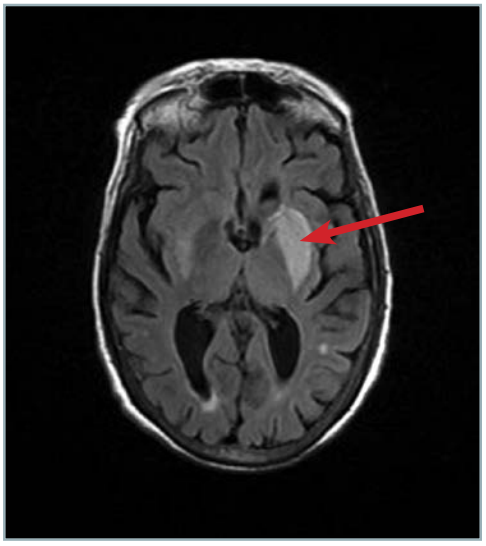
A 67-year-old woman with hypertension, uncontrolled type 2 diabetes mellitus (T2DM), and end-stage renal disease presented to the emergency department with involuntary chorea-form movements involving the right side of her face and her right arm and leg. Fluid-attenuated inversion recovery magnetic resonance image of her brain demonstrated hyperintensity in the lenticular nucleus (image, arrow). Her blood glucose level was 392 mg/dL and hemoglobin A_{1c} was 7.5%. She received insulin, dietary changes, clonidine, hydralazine, hemodialysis, and heparin for chorea, hyperglycemia, basal ganglia syndrome (C-H-BG); T2DM; and stroke. A week after admission, she achieved good glycemic control and was discharged to a rehabilitation facility with residual chorea-type movement. Outpatient follow-up and referrals to an endocrinologist and neurologist were provided.

Uncontrolled diabetes has many well-known adverse effects and clinical presentations. However, this case highlights the importance of recognizing its infrequent manifestations. Chorea-type movement, hyperglycemia, and basal ganglia changes found on magnetic resonance imaging in patients with uncontrolled T2DM are the hallmarks of C-H-BG.[1] Although the pathophysiologic process of this syndrome is unknown, it is vital for physicians to identify C-H-BG as one of the rare and reversible complications of uncontrolled diabetes[1-3] to ensure early diagnosis and management and good outcomes. (doi:10.7556/jaoa.2015.099)



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