

Diabetic hemichorea-hemiballismus with nonketotic hyperglycemia: a rare cause of hyperkinetic movement disorders

Hemibalismo-hemicoreia associada à hiperglicemia não-cetótica: uma rara causa de distúrbios hiperkinéticos do movimento

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A 67-year-old woman was admitted with right hemichorea-hemiballismus. Blood glucose: 831 mg/dl. Magnetic resonance imaging (MRI) showed signal change in the left striatum (Figures 1 and 2).

This entity is characterized by hyperintensity confined to the striatum on T1-weighted MRI and contralateral hyperkinetic movement disorders in diabetic patients (type 2) with

non-ketotic hyperglycemia¹. T2*-weighted gradient-echo MRI can reveal low signal intensity related to petechial hemorrhage². Pathological studies demonstrated selective neuronal loss, gliosis, reactive astrocytosis and hemorrhage³.

The clinical symptoms usually improve markedly following the correction of hyperglycemia. Thus, the prompt recognition of this potentially treatable disease is of paramount importance.

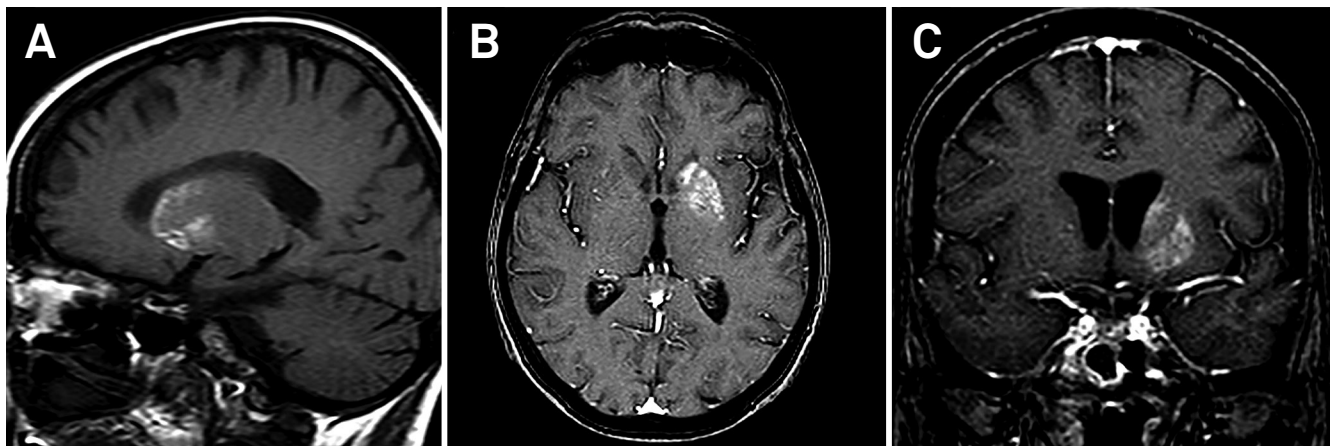


Figure 1. A) Sagittal T1-weighted magnetic resonance imaging showing spontaneous diffuse high intensity of the left striatum (caudate nucleus and putamen). B and C) There is no significant enhancement on axial and coronal T1-weighted MRI after intravenous paramagnetic contrast administration.

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Figure 2. A and B) Axial T2*-weighted gradient-echo MRI showing multiple confluent foci of hypointensities in left striatum probably due to petechial hemorrhage. C) There is no significant signal change on axial diffusion-weighted image.

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