



## Hemichorea-Hemiballismus due to Non-Ketotic Hyperglycemia

### *Non-Ketotik Hiperglisemiye Bağlı Hemikore-Hemiballismus*

Tarkan Ergün, Hatice Lakadamyalı

Department of Radiology, Baskent University, Antalya, Turkey

Eighty-two year-old male patient presented with complaints of sudden onset involuntary movements on the left side of his body for the last 2 days. His medical history included uncontrolled diabetes mellitus. Neurological examination revealed choreic and ballistic movements in the upper and lower left extremities. Laboratory values were normal except fasting blood sugar (435 mg/dL). A high-density lesion that did not have a mass effect in the right lentiform nucleus was seen in the brain computed tomography (CT) scan. In light of his neuroradiologic findings, the patient was diagnosed with hemichorea-hemiballismus due to non-ketotic hyperglycemia. Following serum glucose level normalizing with insulin treatment and administering haloperidol 5 mg/day, involuntary movements recovered without sequelae.

The radiologic findings of hemichorea-hemiballismus due to non-ketotic hyperglycemia are typical, and seen as hyperdense lesions on CT scan, and hyperintense lesions on magnetic resonance imaging in the putamen, globus pallidus and subthalamic nuclei in the contralateral of the affected side (1). It is differentiated from other hyperdense lesions (bleeding, calcified mass, high cellularity mass and cavernoma) on CT by having no mass effect, edema and contrast effect (Image 1).



**Image 1:** Hyperdense lesion with no mass effect is seen in brain CT scan (without contrast) in the right lentiform nucleus (arrows).

**Key words:** Chorea, etiology, hyperglycemia, complications, dyskinesias, diagnosis

**Anahtar Kelimeler:** Kore, etiyoloji, hiperglisemi, komplikasyonlar, diskinezi, tanı

### Reference

1. YLee EJ, Choi JY, Lee SH, Song SY, Lee YS. Hemichorea-hemiballismus in primary diabetic patients: MR Correlation. J Comput Assist Tomogr 2002;26:905-911.

**Address for Correspondence/Yazışma Adresi:** Tarkan Ergün MD, Department of Radiology, Baskent University, Antalya, Turkey

Phone.: +90 242 511 25 11 E-mail: tarkanergun@yahoo.com

**Received/Geliş Tarihi:** 15.03.2013 **Kabul Tarihi/Accepted:** 01.04.2013