



Phronpan CHUTPIBOONWAT^{1,2}, Aurauma CHUTINET^{2,3}, Borwonkhun TONTIWUTIKUL^{2,4}, Thiti SNABBOON^{✉2,4}
Acta Med Port 2021 Dec;**34(12):874-875** • <https://doi.org/10.20344/amp.13111>

Keywords: Corpus Striatum; Diabetes Complications; Diabetes Mellitus, Type 2/ complications

Palavras-chave: Complicações da Diabetes; Corpo Estriado; Diabetes Mellitus Tipo 2/complicações

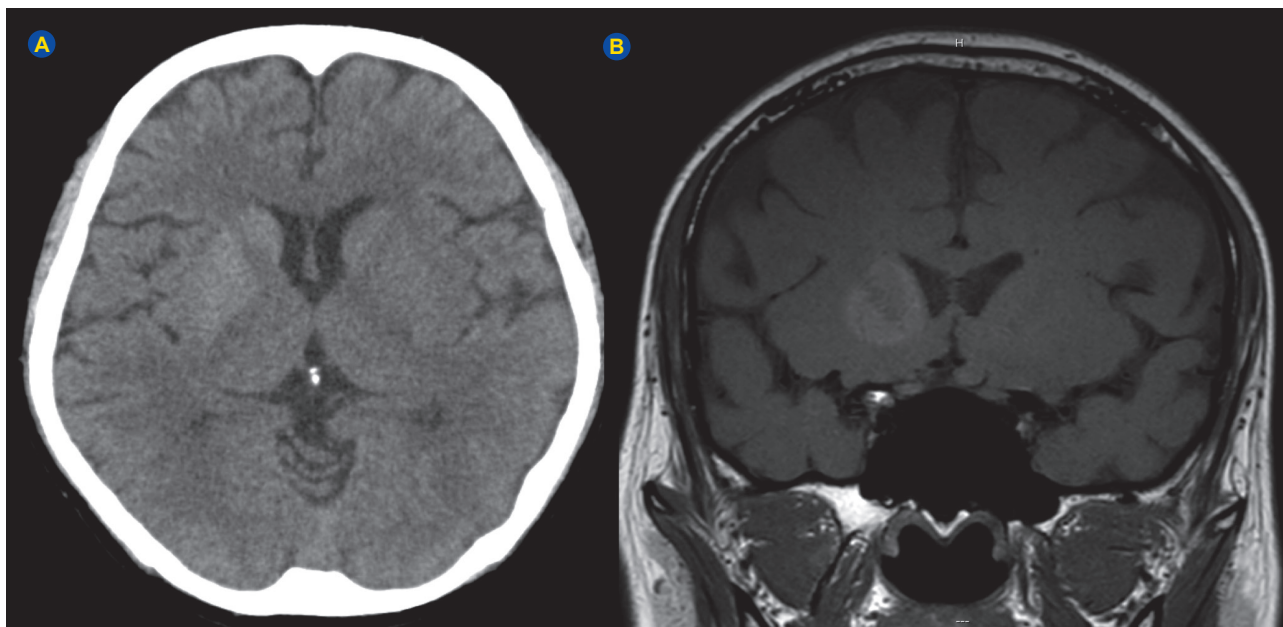


Figura 1 – Hyperdensity on non-contrast CT (A) and hypersignal intensity on T1-weighted magnetic resonance imaging (B) of the brain were shown in the right caudate and right putamen area

A 45-year-old poorly controlled type 2 diabetes mellitus Asian man presented with a three-day history of involuntary, jerky movements of his left upper and lower extremities. Laboratory results revealed plasma glucose of 615 mg/dL and normal osmolality with absent ketoacidosis. The diagnosis of hyperglycemic-induced hemi-ballism or diabetic striatopathy (DS) was confirmed by his imaging study (Fig. 1). His abnormal movements had completely disappeared after hyperglycemic correction with insulin and intravenous fluid.

DS is defined by the chorea-ballismus movements and striatal abnormalities on neuroimaging.¹ Characteristic radiologic findings are hyperdensity on computed tomography scan and hyperintensity on T1-weighted magnetic resonance image in the contralateral striatum. However, these findings are also described in other metabolic encephalopa-

thies or stroke. The proposed mechanisms are the depletion of inhibitory striatal neurotransmitters from vasculopathy, hyperosmolality or hyperviscosity. Treatment includes hyperglycemic correction and sometimes, additional drugs including neuroleptic agents may be required. Complete clinical and radiologic resolutions are usually varying from days to months.

AUTHORS CONTRIBUTION:

PC, AC: Management of the patient and draft of the manuscript.

BT: Management of the patient.

TS: Management of the patient, draft and critical review of the manuscript.

1. Department of Medicine. Lat Krabang Hospital. Bangkok Metropolitan Administration. Bangkok. Thailand.

2. Department of Medicine. Faculty of Medicine. Chulalongkorn University. Bangkok. Thailand.

3. Chulalongkorn Stroke Center. King Chulalongkorn Memorial Hospital. Thai Red Cross Society. Bangkok. Thailand.

4. Excellent Center in Diabetes, Hormone and Metabolism. King Chulalongkorn Memorial Hospital. Thai Red Cross Society. Bangkok. Thailand.

✉ **Autor correspondente:** Thiti Snaboon. thiti.s@chula.ac.th

Recebido: 11 de novembro de 2019 - **Aceite:** 10 de abril de 2020 - **First published:** 26 de maio de 2020 - **Online issue published:** 02 de novembro de 2021

Copyright © Ordem dos Médicos 2021



PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in 2013.

DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

INFORMED CONSENT

Obtained.

COMPETING INTERESTS

All authors report no competing interests.

FUNDING SOURCES:

The authors declare that there were no external sources of study for the performance of this article.

REFERENCES

1. Abe Y, Yamamoto T, Soeda T, Kumagai T, Tanno Y, Kubo J, et al. Diabetic striatal disease: clinical presentation, neuroimaging, and pathology. Intern Med. 2009;48:1135-41.