

### In Response To:

Lee D, Ahn, TB. Glycemic choreoballism. *Tremor Other Hyperkinet Mov.* 2016; 6. doi: 10.7916/D8QJ7HNF

### Original Article:

Roy U, Das SK, Mukherjee A, et al. Irreversible hemichorea-hemiballism in a case of nonketotic hyperglycemia presenting as the initial manifestation of diabetes mellitus. *Tremor Other Hyperkinet Mov.* 2016; 6. doi: 10.7916/D8QZ2B3F

## Letters

### Reply #2 to: Glycemic Choreoballism

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Dear Editor,

This is in reply to a letter written by Dokyung Lee and Tae-Beom Ahn with reference to two articles related to glycemic choreoballism (gCB) published in your journal.<sup>1,2</sup>

It is accurate that the clinical outcome of gCB is variable, although the majority of the literature states that it is a treatable disorder with a good prognosis.<sup>3–5</sup>

However, the diagnostic criteria for gCB would be incomplete unless we exclude other causes of hemichorea hemiballism (HCHB).

Management of gCB is mainly based on controlling blood sugar levels, but dopamine receptor blocking agents are often essential. Here, we again want to highlight that hyperglycemia can result in an ischemic penumbra and reversible clinical syndrome/neuroimaging abnormalities in patients with HCHB; however, prolonged hyperglycemia may result in true infarction with an irreversible clinical syndrome.<sup>6</sup> In summary, a better understanding of gCB requires further research into the pathogenic mechanisms of this disease, which may also aid in its proper management.

### References

1. Cosentino C, Torres L, Nuñez Y, et al. Hemichorea/hemiballism associated with hyperglycemia: report of twenty cases. *Tremor Other Hyperkinet Mov* 2016;6. doi: 10.7916/D8DN454P.
2. Roy U, Das SK, Mukherjee A, et al. Irreversible hemichorea–hemiballism in a case of nonketotic hyperglycemia presenting as the initial manifestation of diabetes mellitus. *Tremor Other Hyperkinet Mov* 2016;6. doi: 10.7916/D8QZ2B3F.
3. Lai PH, Tien RD, Chang MH, et al. Chorea-ballismus with nonketotic hyperglycemia in primary diabetes mellitus. *AJNR Am J Neuroradiol* 1996;17:1057–1064.
4. Piccolo I, Defanti CA, Soliveri P, Volontè MA, Cislighi G, Girotti F. Cause and course in a series of patients with sporadic chorea. *J Neurol* 2003;250: 429–435. doi: 10.1007/s00415-003-1010-7.
5. Ray S, Howlader S, Chakraborty S, Chakraborty PP, Ghosh S. Hemichorea-hemiballism as the first presentation of type 2 diabetes. *Clin Diabetes* 2015;33:87–89. doi: 10.2337/diaclin.33.2.87.
6. Tung CS, Guo YC, Lai CL, Liou LM. Irreversible striatal neuroimaging abnormalities secondary to prolonged, uncontrolled diabetes mellitus in the setting of progressive focal neurological symptoms. *Neurol Sci* 2010;31:57–60. doi: 10.1007/s10072-009-0127-6.