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Hyperglycemic-induced hemichorea-hemiballismus responsive to tetrabenazine: a case report

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Content: Hemichorea-hemiballismus is a continuous, involuntary, random movement involving proximal and/or distal muscles on one side of the body (rarely the face) [1]. It is usually associated with structural brain lesions, but can occur with metabolic abnormalities, in particular during nonketotic hyperglycemia [2]. The most cases of hyperglycemic-induced hemichorea-hemiballismus (HIHH) resolve in some days with return to euglycemic state, but in some cases it can persist [3,4]. Chronic cases have slight or incomplete response to various medical treatments (neuroleptic drugs, benzodiazepines, phenobarbital) [5]. We reported a 91 year-old woman with new-onset diabetes mellitus who presented with the sudden onset of marked right hemichorea-hemiballismus. We found characteristic brain imaging (in the contralateral basal ganglia a little hyperdensity on brain CT scan and increased signal intensity on T1W MRI). The symptoms did not respond to benzodiazepine, phenobarbital, haloperidol, the patient was unable to walk, feed and rest, she developed traumatic skin lesions and (as side effect) mouth tardive diskinesia. We discontinued neuroleptic drugs and inserted low doses of tetrabenazine (25 mg os three times a day). We observed a good drug tolerance and a good of symptom's improvement: the involuntary movements are markedly reduced and the patient can bring food to the mouth by herself, can write and can walk with modest assistance.

References:

[1] Chua CB, Sun CK, Hsu CW, Tai YC, Liang CY, Tsai IT "Diabetic striatopathy": clinical presentations, controversy, pathogenesis, treatments, and outcomes.Sci Rep. 2020 Jan 31;10(1):1594.

[2] Cheema H, Federman D, Kam A. Hemichorea-hemiballismus in non-ketotic hyperglycaemia. J Clin Neurosci. 2011 Feb;18(2):293-4.

[3] Ticona J, Zaccone V, Zaman U, Kashani D, Chung Z, McFarlane IM. Hemichorea-Hemiballismus as an Unusual Presentation of Hyperosmolar Hyperglycemic Syndrome. Am J Med Case Rep. 2020;8(6):159-161. Epub 2020 Apr
[4] Pinsker JE, Shalileh K, Rooks VJ, Pinsker RW. Hemichorea-Hemiballism Secondary to Non-Ketotic Hyperglycemia. J Clin Med Res. 2015 Sep;7(9):729-30.

[5] Ifergane G, Masalha R, Herishanu YO Transient hemichorea/hemiballismus associated with new onset hyperglycemia. Can J Neurol Sci. 2001 Nov;28(4):365-8.