Reviewer’s report

Title: Bilateral dystonia in type 1 diabetes: a case report

Version: 2 Date: 20 June 2008

Reviewer: Yuji Moriwaki

I am familiar with the literature and believe that this case meets one of the 9 criteria for evaluation in the journal: An unexpected event in the course of observing or treating a patient.

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

General Comments
The authors describe a rare case of type 1 diabetes with bilateral dystonia. The history of the case is well organized and shown in the text and motion picture.

Major Comments
1. The authors stated that the differential diagnosis of hemichorea-hemiballism is challenging and includes systemic diseases, such as SLE, Wilson’s disease, and thyrotoxicosis. Although the focal lesions were excluded, are these systemic diseases completely excluded in this case?
2. Is the disappearance of hemichorea-bilateral dystonia solely attributed to the correction of hyperglycemia? How about the effect of haloperidol?
3. Long-term hyperglycemic stress is seen not only in type 2 diabetes but in
uncontrolled type 1 diabetes. Is there any relation between the duration, rapidity, and severity of hyperglycemia and the development of hemichorea-hemiballism in diabetes? Effect of slowly progression, that is long-term hyperglycemic stress suffice for the development of hemichorea-bilateral dystonia in diabetes? Do the authors consider that is why hemichorea-hemiballism is rare in type 1 diabetes, as compared to type 2 diabetes? How about the glycemic profiles of the 53 case reports of diabetes with hemichorea-hemiballism? Other reported cases of type 1 diabetes with hemichorea-hemiballism are also slowly progressive type? Further, are there any differences as to the mechanism between chorea/ballism and dystonia under hyperglycemic stress? Authors should describe these points more in detail. Accumulation of such cases will unravel these matters.

Minor Comments

English should be checked by a native speaker, since there seem to be several grammatical errors, such as
polyposia is polyphagia or polydypsia?
recognized her forefeel or aura at several seconds in prior to#recognized aura for several seconds prior to
At the first phase#At first
elevated her right arm accompanied with#elevated her right arm accompanied by
Whole series of her movement were terminated#Whole series of her movement terminated
electroencephalogram#electroencephalogram
had difficulties with taking meals#had difficulties in taking meals etc

Quality of written English: Needs some language corrections before being published

Declaration of competing interests:

I declare that I have no competing interests.