Reviewer’s report

Title: Periodic catatonia with long-term treatment: a case report

Version: 0 Date: 23 Nov 2016

Reviewer: Lee E. Wachtel

Reviewer's report:

Thank you for submitting this interesting manuscript. Unfortunately, I have a lot of concerns with this manuscript because while it claims to address periodic catatonia, the patient in question is diagnosed with schizophrenia, and I am very unclear as to how these episodes of catatonia are related to the underlying psychotic pathology, if at all. The authors state that the patient has periodic catatonia - are they referring to the historical concept of Gjessing's periodic catatonia, or just the waxing and waning of the catatonic syndrome as it is known to occur. The elephant in the room, however, is the patient's schizophrenia. There is no comment or discussion regarding the patient's psychotic illness as it relates (or does not relate) to the development of CAT symptoms. This is a critical piece of information, b/c it begs the question of whether or not this patient is just experiencing recurrence of CAT symptoms when the psychotic symptoms are not well-controlled, which could be related to many things, like variable medication compliance, incomplete response to antipsychotics, concomitant affective illness - none of these questions that immediately come to mind are addressed.

I don't see how one can accurately look only at the CAT in this patient who clearly is suffering from ongoing psychotic illness, and requiring changes in antipsychotic medication.

The possibility of impact of the antipsychotics themselves on CAT symptoms is also not addressed, yet highly salient as antipsychotics can often worsen or precipitate CAT.

There is not any discussion of the nature of the lorazepam-diazepam protocol, which would be very relevant, particularly to understand how it differs from the Western practice of benzodiazepines in escalating dosages to target CAT, or usage of ECT. There is no mention of ECT as a treatment consideration for this patient's psychopathology, although ECT of course has very high efficacy and safety in CAT.

The seasonal aspect of the patient's CAT symptoms is interesting, but again, the question I would have is whether this is just variability in the CAT, or related to ups and downs of the psychosis.

I think this paper could be reworked to provide a more comprehensive understanding of the relationship between the psychotic and catatonic symptoms that this patient presented over the extended time course - perhaps with rating scale scores on a psychosis rating scale and the Bush-Francis CAT scale, or other scale that might have been used at the time. It would be important to tease out the variability of the psychotic illness from the variability of the CAT, and how the
treatment of both illnesses was managed, b/c it just doesn't make sense to ignore the "red flag" of the psychotic illness in this patient.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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