Reviewer's report

Title: Deep Brain Stimulation for Treatment-Refractory Obsessive Compulsive Disorder: a Systematic Review

Version: 3 Date: 18 May 2014

Reviewer: Patricio Riva-Posse

Reviewer's report:

This review article by Kohl and colleagues entitled "Deep Brain Stimulation for Treatment-Refractory Obsessive Compulsive Disorder: a Systematic Review" is an interesting and comprehensive review of the literature exploring this appealing neurosurgical intervention for severe cases when all other treatments have failed.

In my opinion it is worthwile publishing as it summarizes the major studies in the field. It is systematic and comprehensive.

Minor comments: I think it would add greatly to the richness of the discussion a figure with the anatomical locations of the the 5 targets under study, but even more importantly the three that share location but differ in name according to the group that publishes. Therefore, a visual explanation of the subtle differences of VC/VS, ALIC and NAcc is useful. On the other hand, explaining the usual contacts chosen in each (most dorsal vs most ventral) , will help in picturing the very important discussion point the authors raise about this "superordinate brain region".

Although not a necessary component of the review, but as an additional explanation for the successes and failures of this therapy (as well as potential ways of improving outcomes) I would suggest discussing the impact of stimulation in the network like Cameron McIntyre’s group - already cited in ref 3 (i.e. Human Brain Mapping 2012) in particular in regards to the capsule fibers in the cortico striato pallido thalamo cortical circuit

Minor correction: page 4, line 17 clarify on punctuation

Minor correction : I would refer to the "ethics" committees (formed to discuss on the rights and well-being of research subjects) instead of the "ethical" committees. An Ethics Committee (or someone in a committee of sorts) may or not be "ethical" which is an adjective...

Level of interest: An article of outstanding merit and interest in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare I have no competing interests