Reviewer's report

Title: Hyperintense putaminal rim at 1.5T: prevalence in normal subjects and distinguishing features from multiple system atrophy

Version: 1 Date: 8 March 2012

Reviewer: Oren S Cohen

Reviewer's report:

Tha et al in their study documented and characterized the appearance of HPR in normal individuals and in MSA patients. The novelty of the study is the fact that HPR is present in around third of normal individuals and therefore should not automatically be considered pathologic

1. The question posed by the authors is well defined (at the end of the introduction section)

2. The methods section is generally clear but there is one point that is unclear with regard to the normal individuals. It is noted that the study was retrospective but later the authors not that they all had a normal neurological examination. The authors should be more specific noting the chronological relation between the examination and the scans

3. The data are sound and the manuscript adheres to standards of reporting.

4. The discussion is well written and address most of the question raised (e.g. the difference between MSA-P and MSA-C)

5. The limitations of the study are sufficiently discussed in the discussion

6. the writing is clear and the title and abstract accurately convey what has been found

Major revisions:

Abstract

1. The authors claim that they "This study establish the MRI characteristics of HPR in 1.5T and the features which distinguish from HPR in MSA patients. (the end of the abstract). This claim is not supported by the data in table 2 and should be rephrased (maybe to summarize the differences in a table)

Methods

2. As noted above for the time of neurological examination in normal individuals

3. It is not noted if MRI's of the normal individuals were also normal or revealed clinically silent pathologies
4. The logic of using dummy dataset is not clear to me

Minor essential revisions

Results

1. The sentence "Thirty eight percent and 0.6 % of HPR had mild and moderate....." is unclear

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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