Reviewer's report

Title: Comparative clinical characteristics of neuromyelitis optica spectrum disorders with and without spinal cord atrophy

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Reviewer: Philippe cabre

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Wang and Coll report in a very large series of NMOSD frequency of spinal cord atrophy (12.5%). The authors show that spinal cord atrophy is linked to disease duration and that NMOSD patients with spinal cord atrophy exhibit a more severe disability.

The topic is of interest since very few papers focussed on this important neuro-radiological parameter along the course of NMOSD.

However, there is an important methodological weakness in this study since the authors poorly determined spinal cord atrophy in their study. In addition, reproducible tool ie cord area at C2 level has been already published to measure spinal cord atrophy on MRI (Loussef and Coll, Brain 1998). Most importantly, the authors did not discuss this limitation.

Level of interest: An article whose findings are important to those with closely related research interests

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 that i have no competing interests' below