

Long term efficacy of rituximab in MAG positive peripheral neuropathy RIMAG study follow-up

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Background: There is no to date consensus from the literature on the optimal treatment of IgM anti-myelin-associated demyelinating polyneuropathy (IgM anti-MAG neuropathy). The RIMAG study, published in 2012, did not show any improvement at one year using the inflammatory neuropathy cause and treatment sensory score (ISS) in rituximab patients when compared to placebo. However there were significant changes in some secondary outcomes as INCAT score or self-evaluation scale. In the same way, another randomized controlled trial published in 2009 disclosed some significant changes in functional scales. Consequently, a recent Cochrane review outlined rituximab as a possible efficacious therapy in some patients with IgM anti-MAG neuropathy. This study aimed to give results of the follow-up in a subset of patients included in the RIMAG study.

Patients and methods: Patients from our center who participated in the RIMAG study underwent a new evaluation in 2014, using the same outcome measures used in the original study.

Results: Data were available in 7 rituximab patients (group 1) and in 8 placebo patients (group 2). The median follow-up was 6.0 (IQR 4.9; 6.5) years. All but 2 patients in group 2 were treated with rituximab during follow-up, versus 2 out of 7 in group 1. No significant change in the ISS was observed in either group. Group 2 showed a clinical worsening in the 10-meter walk time ($p=0.016$).

Conclusion: The RIMAG follow-up study found no change in the ISS used as primary outcome as in the RIMAG study. However, additional interesting result was worsening in the 10-m walk time in group 2, a functional test possibly more sensitive in assessing the effects of treatment. In addition, a number of patients having received placebo in the RIMAG study were treated with rituximab during follow-up, unless not reaching significance when compared with group 1. The follow-up RIMAG study mainly stresses the lack of relevant clinical scales, sensitive enough to capture small, even meaningful improvements in IgM anti-MAG neuropathy.