

Clinical and functional change in multifocal motor neuropathy treated with IVIg

ABSTRACT

We determined the clinical progression, disability and outcome of 11 Multifocal Motor Neuropathy (MMN) patients from Malaysia. Mean patient age was 46.8 (SD 13.3), with mean disease duration of 108.0 months (SD 80.2). All reported unilateral limb weakness at onset. At diagnosis, after mean 49.9 months (SD 73.5) delay, 7 (63.6%) had more than 2 limbs involvement. Nine (90%) of 10 patients received induction IVIg dose of 2.0 gm/kg responded, demonstrated improvement in MRCSS of > 2 points or mRS score of > 1 point. We observed 38.5% drop in IVIg dose to mean 1.12 gm/kg/month after 12 months of treatment, and a further 34.8% drop upon 24th month treatment to mean dose of 0.73 gm/kg/month. This was in parallel with initial improvement in MRCSS and mRS, observed among 88.9% and 77.8% of the patients, and later further improvement (33.3%) or stabilization (66.7%) of mRS score toward 2nd year. During the same period, 50% of patients reported deterioration in ONLS, 33.3% in grip strength and 16.7% in MMN-RODS. Beyond 36th month, average annual IVIg dose increased at 0.12 gm/kg/year (SD 0.09) or 11.2%, up to the 84th months. Despite that, progressive deterioration was observed in term of number of limbs involvement, definite motor conduction blocks on electrophysiology study, and both clinical as well as functional scores. Although IVIg dose reduction for maintenance treatment in MMN is recommended, careful clinical assessment is required to prevent under-treatment. Use of reliable and responsive modern outcome measures is important to quantify clinically relevant change to guide therapy.

Keyword: Multifocal motor neuropathy; Inflammatory neuropathy; Intravenous immunoglobulin; Clinical outcome; Malaysia; Southeast Asia