Fingolimod versus dimethyl fumarate in first-ever treatment of multiple sclerosis: the Lausanne real-life experience

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Abstract

Background: The current treated multiple sclerosis population is very different from that of patients in randomized clinical trials.

Objective: To study long-term efficacy and tolerance of fingolimod (FTY) and dimethyl fumarate (DMF), as first-line treatment in real-life in early treated treatment-naïve MS patients.

Methods: Retrospective analysis of 82 patients from the Lausanne prospective MS registry fulfilling the inclusion criteria: FTY or DMF as first-line treatment, treatment initiation within 36 months of disease onset and treatment duration > 12 months.

Results: 61 patients were on FTY and 21 on DMF (median disease duration prior to treatment initiation of 10 months). Demographics and MRI characteristics at baseline were similar in both groups, but patients on FTY had higher pre-treatment clinical activity. Twenty percent of patients in both groups had highly active disease. At last follow-up (median 43 months), there was no change in mean EDSS score. 54.5% of FTY and 61.9% of DMF patients reached NEDA 3 status ($p=0.258$). Both treatments significantly decreased occurrence of new T1 Gd-enhancing lesions ($p<0.001$). The main reason for discontinuation was disease activity without severe side effects on either treatment.

Conclusion: In our clinic, FTY was prescribed more often than DMF, especially in patients with evidence of higher disease activity, although our findings support efficacy and tolerance of both drugs in early treated treatment-naive MS patients.