Teriflunomide is a new oral disease-modifying agent recently approved for the treatment of RRMS. It has demonstrated efficacy and safety in a number of large multicenter phase III clinical trials. However, its benefit in real-world MS patients is still not well known.

To report the efficacy and side effects of teriflunomide when used in MS patients followed in a community hospital MS center.

We retrospectively reviewed the charts of all our RRMS patients treated with teriflunomide since its approval in September of 2012. Number of clinical relapses and potential side effects were studied.

We had 24 patients, 20 women and 4 men with a mean age of 54.5 years. Mean follow-up was 6.5 months. The most common reasons for starting teriflunomide were side effects from prior disease modifying agents (41.7%) followed by lack of efficacy of prior treatments (29.2%; Fig. 1).

The most common side effect was hair thinning or decreased hair density, mostly mild, occurring in 50% of the patients by the third month and slightly decreasing in its incidence to 41.7% by month six (Fig. 2). Abnormal liver function tests occurred in approximately one third of the patients by the end of the third month, but decreased to 8.3% by month six (Fig. 3). Diarrhea and stomach upset peaked by the end of the first month with an incidence of 28.6% (Fig. 4) and 18.9% (Fig. 5) respectively. Increased blood pressure was detected in 2 patients and infection (UTI) in one patient only. Four patients discontinued the treatment due to side effects, three of them due to gastrointestinal upset. No clinical exacerbations have occurred so far, but one of the patients had a new non-enhancing MS plaque in her brain at a routine MRI follow-up study.

In our study, the side effects from teriflunomide were similar to phase III trials, even though its incidence was overall higher than previously reported, prompting discontinuation of treatment in 1/6 of the patients. During this short follow-up no clinical exacerbations were observed.

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