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L04 - Immunosuppressive agents

Efficacy and Safety Analysis of Alemtuzumab in Relapsing-Remitting Multiple Sclerosis

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Background

Alemtuzumab is a humanized monoclonal antibody against CD52 approved for Relapsing-Remitting Multiple Sclerosis (RRMS), which is a progressive illness affecting the Central Nervous System.

Purpose

The objective of the present study is to evaluate the efficacy and safety of alemtuzumab.

Material and Methods

A retrospective study was carried out in a university hospital. Patients treated with alemtuzumab were searched for the November 2016 – November 2017 period. Data was drawn from Clinical Digital History (Diraya©) and visits from the Outpatients module (Farmatools©). Demographic data (age, gender), clinical data (diagnosis, previous treatments, number of cycles, EDSS before and after treatment, number of relapses since alemtuzumab beginning, MRI lesions evolution) and safety data (adverse events [AE], blood tests) were registered.

Results

25 patients were found. 80% were women. Mean age was 41.5 (±9.3).

23 patients (92%) had a diagnosis of RRMS, 1 (4%) of the Secondary Progessive type and 1 (4%) of the Primary Progessive type.

All patients went through the second infusion cycle during the studied period. 21 patients (84%) had received a mean of previous treatments of 1.9 (±1.1), the rest of them were naive.

Mean EDSS before treatment was 4.7 (±1.7) and after was 3.5 (±2). During the period between first and second cycle (1 year), none of them had a relapse.

16 patients (64%) had a reduction in CNS lesions confirmed by MRI. 6 patients (24%) had no change.

After infusion, the most reported AE were:
- Migraine: 14/25 patients
- Rash: 9/25 patients
- Fever: 5/25 patients
- Pruritus: 3/25 patients
- Hypotension: 3/25 patients

In blood tests, 100% had lymphopenia, with a mean duration of 6.3 months (±3.7) after first cycle and 4.9 months (±2.9) after the second cycle.

Conclusions

Alemtuzumab seems to be an effective treatment for EMRR as shown by the reduction in EDSS before and after treatment, any relapse between cycles in our population and lesion reduction in the 64% of patient and no change in 24%. Most of AE were mild, with migraine being more prevalent during infusion and rash after it.