

Altering the course of disease in multiple sclerosis: many large steps forward

Alterando o curso da doença na esclerose múltipla: grandes passos para frente

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In the early 1990s, the greatest experts were writing in the best journals that all one could do for a patient with multiple sclerosis (MS) was to provide rehabilitation and symptomatic treatment and avoid infections¹. When commercial formulations of interferon beta and glatiramer acetate for treating MS were introduced in the mid-1990s, we moved to an era of prophylactic and specific treatment for a disease that until then had been virtually untreatable². Towards the end of that decade, we had moved a large step forward: we now had the option of altering the evolution of the disease through the new immunomodulatory drugs, and the 21st century started with hundreds of thousands of patients with MS undergoing treatment with interferon beta or glatiramer acetate. The 21st century also came with news of the “magic bullet”, the monoclonal antibody natalizumab, specific for blocking the migration of lymphocytes through some barriers, including to the central nervous system³. The effect of natalizumab was so impressive that experts created the expression “free of disease activity” to define a condition of no relapses, no new lesions on resonance imaging and no progression in disability^{4,5}. In fact, this was not a good choice for defining a state of no disease activity, if all that is looked for is these three parameters, and this expression is no longer used.

Soon after the results from the initial clinical trials and commercialization of natalizumab came the blow that would make the Food and Drug Administration withdraw natalizumab from commercialization: cases of progressive multifocal leukoencephalopathy (PML) caused by JC virus were described⁶. However, specific guidelines and studies on risk stratification were able to put natalizumab back onto the market, and patients with MS again could benefit from its remarkable effects on the disease⁷.

Although large steps forward continue regarding the management of MS, the subject of this Editorial stops here: in 2015, natalizumab is one of the most effective drugs for treating MS. It has to be prescribed, monitored and managed by those who have experience and awareness of its benefits and risks. In the right hands, for selected patients, natalizumab offers an excellent option for treating MS. This is what is shown in the paper from Oliveira et al.⁸ published in this issue of *Arquivos de Neuropsiquiatria*. These authors report on 75 cases of patients with MS who were treated with natalizumab for an average period of two years. The vast majority of them were undergoing natalizumab treatment due to therapeutic failure relating to first-line immunomodulatory drugs. Despite one case of PML that raised particular concern, the treatment was typically well tolerated and very efficacious regarding relapses and disability.

Natalizumab is a milestone in the history of MS treatment: it has taught us that better disease control can be achieved but has also made us learn that severe adverse events may accompany the better efficacy profile of a new drug. We need to study hard, so as to learn about the risk-benefit balance in disease management. We also need to understand that we cannot be overconfident, such that we might prescribe what is new just for the sake of it.

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