Demyelinating diseases in patients treated with tumor necrosis factor inhibitors for rheumatic diseases.

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The discovery of biologics and the development of tumor necrosis factor α antagonists (TNFi) has changed the prognosis of most inflammatory rheumatic diseases. The safety of these drugs is well documented and the most frequent precautions include serious infections. However, since these agents are being used, a number of neurological events and series of cases have been published, although it is not yet established a definite cause-effect relationship between TNFi and demyelination.

The exact incidence of demyelinating diseases (DD) following TNFi therapy is presently unknown. It has been suggested that TNFi may increase the risk of demyelinating diseases (DD) in patients with rheumatoid arthitis by about 30%. The French national survey reported 33 cases of DD ocuring during anti-TNF therapy On the other hand, other researchers found that the incidence of DD, especially Multiple Sclerosis, during TNFi therapy did not differ significantly compared with the general population. As it is not clear whether TNFi increase the incidence of DD in patients with rheumatic diseases, our proposal is to elaborate the first analysis of DD in Portuguese patients with rheumatic diseases registered at Reuma.pt. We intend to evaluate and characterize the cases of DD in patients under treatment with TNFi, analyzing the type of demyelinating disease, the interval of time between the beginning of therapy and the diagnosis of neurological disease, the TNFi used and duration of treatment.

Our work will be a prospective multicenter study and include patients diagnosed with demyelinating disease, after starting a TNFi for the following chronic rheumatic diseases: Rheumatoid Arthritis, Spondyloarthritis, Psoriatic Arthritis, Juvenile Idiopathic Arthritis and Systemic Lupus and registered at Reuma.pt. Patients diagnosed with DD prior to treatment with TNFi will be excluded.

After data collection and statistical analysis, we expected a publication during the year of 2019.

With this work, we hope to contribute to a better characterization of the safety of the various TNFi agents, particularly in terms of the risk of development of DD in patients with chronic inflammatory rheumatic diseases.