Tocilizumab for the treatment of patients with rheumatoid arthritis and interstitial lung diseases: a case series

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Rheumatoid arthritis (RA) related interstitial lung disease (ILD) is one of the first causes of death in RA, with a mean survival of 2.6 years after diagnosis (1). The correct therapeutic approach to RA-ILD is still debated, since no controlled studies are available (2). The choice of the treatment is further complicated by the supposed role of many disease-modifying anti-rheumatic drugs (DMARDs) in the onset or worsening of pre-existing ILD (1, 2). Recently, Piccianti Diamanti et al., reported a case of a patient with RA-ILD efficaciously treated with tocilizumab (TCZ), speculating about its possible role in this sub-group of patients (2).

In this background, we report our experience of 4 patients with RA-ILD treated with tocilizumab monotherapy, in which remission of RA and stability or improvement of ILD were obtained (see table for clinico-serological data).

Patient 1: treated with methotrexate (MTX) and rituximab (RTX) from 2001 to 2009, when a high resolution computerised tomography (HRCT) showed a thickening of the interstitium of the right lower lobe. Treatment with abatacept was performed until 2013, when a low disease control of RA (DAS28 5.44). After 6 months, the patient showed a low disease activity (DAS28 3.03), while no changes were observed in respiratory symptoms and function. Although the ILD/MTX link is not clearly defined, the use of MTX is nowadays not indicated in patients with RA-ILD (2-4), while it is largely recommended for the management of RA, as first line therapy or in association with biologic DMARDs (5). TCZ could represent a possible safe drug in these patients, considering its efficacy in RA also as monotherapy (6). Moreover, interleukin-6 plays a key role in synovial cell proliferation, but it is also potentially involved in extra-articular manifestations of RA and other connective tissue diseases (7-9).

The management of RA-ILD patients remains a critical unmet medical need. Prospective studies on larger populations are required to define whether biologic or conventional DMARDs could really influence the evolution of ILD in RA patients (2, 10). Moreover, the enrolment of RA patients with an early diagnosis of ILD is mandatory to perform ad hoc studies and clinical trials required to define the best clinical management of a such severe complication in RA patients (11).

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References