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Letter to the Editor

Severe bone marrow aplasia secondary to a combination of methotrexate and leflunomide in a patient with rheumatoid arthritis of the elderly☆

Aplasia medular severa secundaria a la combinación de metotrexato y leflunomida en un paciente con artritis reumatoide del anciano

Dear Editor,

Rheumatoid arthritis (RA) of the elderly is that which occurs over 60–65 years of age.[1] In the majority of the works is defined as an arthritis less aggressive than the one that takes place in the young population, although this conclusion is in doubt.[1] The elderly patients with seropositive rheumatoid arthritis have a greater number of swollen joints, more erosions and greater mortality than those who are seronegative.

Methotrexate is the disease-modifying antirheumatic drug most commonly used in patients with RA.[2,3]

We present the case of a 77-year-old male, without relevant medical antecedents, diagnosed 2 years ago with positive rheumatoid factor and positive anti-citrullinated peptide antibody RA, in treatment with rapid escalation of methotrexate until reaching 20 milligrams (mg) subcutaneous weekly since 6 months ago, along with 5 mg of folic acid weekly, prednisone 5 mg/day and leflunomide 20 mg/day. The patient has not had laboratory tests in the last 6 months and in the last one is detected a hemoglobin of 7.7 g/l, 12,000 platelets and 3100 leukocytes with 400 neutrophils. Hospitalization is decided after the result. The patient denies any fever of clinical symptoms of infection; he presents oral lesions suggestive of aphthous stomatitis with blood remnants, without other bleeding signs. The rest of the exploration by organs is normal, as well as the radiological and serological studies. A dysplasia in the myeloid series is observed in the bone marrow immunophenotype. After the admission of the patient and the discontinuation of the drugs, the hematologic alterations resolved in 2 weeks.

The combination of methotrexate and leflunomide in the treatment of RA is a useful strategy as shown in some works.[4]

Bone marrow toxicity is a complication of the treatment with methotrexate monotherapy,[2,5,6] as well as of the treatment in combination with leflunomide.[7]

There are some risk factors that have been related with a higher incidence of toxicity for these drugs, such as hypoalbuminemia, altered renal function, and elderliness, among others.[2] The prescription of a single drug or a combination in elderly patients with RA will depend on the individual characteristics of each patient, taking into account that therapeutic efficacy is usually achieved with lower doses.[1]

There are published cases of hematologic affectation in elderly patients treated with methotrexate.[2] In our case, the patient was under treatment with high doses of methotrexate and leflunomide without having had laboratory tests in the last six months. Close and continuous monitoring of these patients is important in order to avoid serious complications.

Conflict of interest

The authors declare that they have no conflict of interest.

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