Macrophage activation syndrome after leflunomide treatment in an adult rheumatoid arthritis patient

At the end of July 2009, a 64-year-old man with seronegative RA (diagnosed in 1997) who, a month before, had added LEF 20 mg every other day to MTX 10 mg/week due to a flare of his arthritis, developed a persistent high fever and severe fatigue. He was admitted to an Infectious Diseases Division where extensive investigations revealed the following abnormalities: ESR 46 mm/h, CRP 8.6 mg/dl (normal <1 mg/dl), aspartate aminotransferase 78 IU/l (normal 10–42 IU/l), alanine aminotransferase 101 IU/l (normal 10–40 IU/l), lactate dehydrogenase 654 IU/l (normal 266–500 IU/l), ferritin 5855 ng/ml (normal 10–120 ng/ml), triglycerides 308 mg/dl (normal 30–180 mg/dl), platelets 99 x 10^9/l and positive CMV and EBV genome tests. The consulting rheumatologist (P.R.) suggested a diagnosis of macrophage activation syndrome (MAS) [1], which was confirmed by bone marrow aspiration showing focal macrophages with haemophagocytic activity (Fig. 1). The LEF washout procedure (cholestyramine 8 g/day for 10 days) was immediately started, and prednisone 50 mg/day and ganciclovir 3 g/day were administered. This treatment led to a marked improvement within a few days. Many drugs have been associated with MAS but, to the best of our knowledge, this is the first report of a case probably triggered by LEF therapy.

Acknowledgements

We would like to thank Renato Bassan (U.O. Ematologia – Ospedali Riuniti di Bergamo) for providing the pictures of this case.

Disclosure statement: The authors have declared no conflicts of interest.

Massimo Ricci1, Paolo Rossi2, Gabriele De Marco1, Valentina Varisco1 and Antonio Marchesoni1

Reference