Letters to the Editor

The effect of controlling inflammatory activity in the colon on the response to infliximab of autoimmune haemolytic anaemia associated with ulcerative colitis

Key words: Ulcerative colitis. Haemolytic anaemia. Infliximab.

Dear Editor,

We present the case of a 35-year-old woman who has a history of hypothyroidism and rheumatoid arthritis, and was diagnosed five years earlier with extensive ulcerative colitis (UC). After four years, she developed corticodependence and started azathioprine, despite which she still needed steroids three months later. A haemoglobin level (Hb) of 80 g/l was detected along with the following haemolysis data: LDH 289 U/l, reticulocytosis 13.14 %, bilirrubin 1.58 mg/dl with predominance of unconjugated bilirubin, consumption of haptoglobin (< 7) and a positive Coombs test. After six months with azathioprine she remained symptomatic with a Hb level of 60 g/l, providing confirmation of haemolysis. The proctosigmoidoscopy showed evidence of severe damage and given the absence of intestinal and haematological response to full doses of steroids, an initial dose of infliximab was administered; it improved the colitis, and after the second dose of infliximab the patient remained asymptomatic with increased haemoglobin levels of up to 78 g/l and progressive normalisation of haemolytic parameters. Azathioprine was re-introduced, and after the third dose of infliximab Hb was 120 g/l and the colitis remained in remission. However, at two months, an intestinal recurrence occurred with another drop in Hb (95 g/l) and increased haemolysis; the first maintenance dose of infliximab was brought forward to six weeks with full control of the symptoms and her Hb level (121 g/l), which remained stable after two years of treatment.

Discussion

The incidence of autoimmune haemolytic anaemia (AIHA) in UC is 0.2 %-1.7 % (1,2). The treatment of both conditions aims to control the immune system through the progressive use of steroids (3) and immunosuppressants such as azathioprine and cyclosporin (4). Up until a few years ago, when these failed, different surgical options would be used: Splenectomy in isolated AIHA or colectomy when associated with UC, to eliminate the triggering of the immune response by the antigenic stimulus. Recently, biologic drugs have appeared which are effective in the treatment of UC –infliximab (5) or adalimumab (6) (anti-TNF alpha)– and AIHA –rituximab (7) (anti-CD20)–, which function at different levels, depending on the physiopathology of each condition; in fact, rituximab can lead to de novo colitis or deterioration of existing colitis (8,9). Even without data on the use of infliximab in AIHA, we decided to use it because of the coexistence of UC based on the main etiopathogenic theory of this association, which explains AIHA as being caused by the cross-reactivity of red blood cells and antibodies formed against antigens in the colon (2). Therefore, as occurs in our case, control of inflammatory activity should run in parallel with control of Hb levels and haemolysis. To support this, we highlight the comparisons between this case and our previously published case (10); control of the current case is difficult because it involves serious pancolitis, requiring the first maintenance dose to be brought forward, and in the previously published case - moderate left-sided colitis –after induction, the patient remained asymptomatic with stable Hb levels (Fig. 1).

In short, infliximab is an alternative treatment for AIHA associated with UC that should be tried before resorting to surgery; it brings about a parallel improvement in both conditions because controlling the inflammatory activity in the colon is the basis of the treatment.
Fig. 1. Progress of the haemoglobin level in the current patient (case 1) and the one published previously (case 2) Relationship to colitis activity (infliximab infusions: Dose 5 mg/kg).

Eduardo Leo-Carnerero, Angela Araujo-Míguez, Claudio Trigo-Salado, M.ª Dolores de la Cruz-Ramírez, José Manuel Herrera-Justiniano and José Luis Márquez-Galán

Digestive Diseases Department. Hospital Universitarios Virgen del Rocío. Sevilla, Spain

References