Leukocytapheresis in patient affected Ulcerative Colitis refractory to pharmacotherapy.

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Background/Aims:

Leukocytoapheresis in patients suffering from Chronic Inflammatory Bowel Diseases (IBD): Crohn's disease (CD) and Ulcerative Colitis (UC), are chronic inflammatory disorders, impairing quality of life. IBD inflammation induced by activation of inflammatory markers, increased leukocytes levels, into the inflammatory cascade. Pharmacotherapy is based on steroids-immunosoppressive, with inadequate response or intolerance to conventional therapy. The topic of these case reports is to present experiences to develop possible evidence and support the indications of Leukocytoapheresis therapy. In addition, to support existing studies about the combination of Leukocyteapheresis and Vedolizumab in patients affected from Ulcerative Colitis, refractory to medical therapy.

Methods

We report a patient of a 53-year-old woman affected steroid-dependent Ulcerative Colitis (UC), diagnosed in 2009, in clinical exacerbation phase. Between 2010 and 2011, treatments with Azathioprine, Ciclosporin and Infliximab were unsuccessful. The gastroenterologist proposal Vedolizumab, but the patient would prefer to first repeat cycles of Leukocyteapheresis, performed in 2011 with success clinical response. In 2021 Leukocyteapheresis five procedures are planned to be performed weekly at our Department, carried out with a hydrophilic polysulfone sorbent cartridge (Leukocyte Adsorber, Leuc@pher). The possible protocol will evaluate a maintenance treatment, with a monthly interval procedure for 6-12 months, based on the clinical response. 1800 ml of blood were processed. ACD 160 ml was used as the anticoagulant and after to continue with heparin sodium 9000 UI. None immediate adverse events.

Results

Blood chemicals tests pre-Leukocyteapheresis: hemoglobin 14 g/dL, platelets normal count. PCR 0.12. Iron, Transferrin, Ferritin normal. After the third procedure: relief of symptoms (reduction in the number of 5 to 2 stools/day, abdominal pain and rectal bleeding, Mayo score 2), VES negative, WBC 10.56 10* 3/mcL, faecal calprotectin 108mg. Control colonoscopy, after Leukocyteapheresis cycle completed, shows a picture of the intestinal mucosa in remission, it appears regular. Symptoms restart and she continues Vedolizumab (Entyvio) 300 mg at 2-4-8 weeks to stabilize

Conclusion

We suggest an possible adjuvant role of Leukocyteapheresis in combination therapy with vedolizumab. The adjunct of apheresis to biologics could represent a opportunity in patients with UC no responder to biologics, for to try to reduce the need of colectomy