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indexes of treatment response. Aim of this study was to evaluate the use of soluble transferrin receptor/log10 ferritin index (sTfR-F) as a predictor of the effectiveness of intravenous iron in IBD-associated anemia.

**Methods:** 54 patients with IBD were included in this study (30 men, 22 ulcerative colitis, 32 Crohn's disease). Intravenous ferric carboxymaltose was administered at a maximum dose of 15 mg/kg or 1000 mg within 15 min. Anemia was defined as hemoglobin Hb <13 g/dl in men and Hb <12 g/dl in women. Several laboratory and clinical parameters were analyzed including sTfR-F index at week 0 and week 4.

**Results:** Ferric carboxymaltose was administered at a mean dose of  $1290\pm329\,\text{mg}$ . Hemopoietic response (increase of Hb >2 g/dl) was observed in 66.7% of the patients. Mean CRP and ESR values were not statistically significant different between the two phases of the study and no significant correlation between CRP and sTfR-F index was found. Intravenous ferric carboxymaltose infusion had as a result a significant reduction of sTfR-F index at week 4 compared to week 0 (p < 0.0001). Patients with hemopoietic response after treatment had significantly higher baseline sTfR-F (5.2 $\pm$ 3.6) compared to those without response (1.5 $\pm$ 0.8). Baseline sTfR-F >1.4 had a sensitivity of 91.8% and specificity of 94.4% in the prediction of the hemopoietic response.

**Conclusions:** sTfR-F index is a highly reliable predictive index of the effectiveness of intravenous ferric carboxymaltose infusion in IBD-associated anemia.

## P124

Use of interferon-gamma release assay (IGRA) and tuberculin skin test (TST) for tuberculosis screening in patients candidates for anti-TNF terapy in inflammatory bowel disease (IBD)

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Background: Both the Food Drug Administration (FDA) and the European Medicines Agency (EMEA) recommend performing screening to rule out latent tuberculosis infection (LTI) in patients who are treated with anti-TNF. The IGRA Quantiferon-TB-Gold in Tube® test (QFT-G-IT) in combination with the TST may be useful in detecting LTI in an intermediate-incidence country as ours. We intend to evaluate the use of QFT-G-IT in combination with the recommended tests in Spain (TST, TST retest, clinical data and Chest X-Ray) for LTI diagnosis in patients with IBD.

Methods: Observational study of all patients with IBD candidates for biologic therapy in our hospital from June 2008 to October 2012. Informed consent was obtained and the protocol was approved by the hospital ethics committee. The following data were collected: age, sex, immunosuppressive therapy, history of tuberculosis, history of vaccination (by scar on arm or buttock), TST, TST retest, QFT-G-IT and chest X-ray. Results: 87 patients were recruited, 40 men (46%) and 47 women (54%) with a mean age of 39.84 years (range 16-74 years). The 62.1% had Crohn's disease, 35.6% had ulcerative colitis and 2.3% indeterminate colitis. The 96.6% had received immunosuppressive therapy. 23% were BCG vaccinated, 50.6% non-BCG vaccinated and 24.1% did not know. The TST was positive in 9 patients (10.3%), the TST retest became positive in 1 patient, and 3 patients (3.4%) were positive for QFT-G-IT (one of which had been negative TST retest). 11/87 had at least one of the two test positive, so LTI rate in our patients was 12.6%. Chest X-ray was normal in all cases. The index of agreement (Kappa) between TST and QFT-G-IT was low (Kappa = 0.121; standard error 0.261; 95% CI -0.391; 0.634). Among the 10 patients with a positive TST, there were 7 BCG vaccinated cases, all of them with a negative QTF-G-IT test.

Conclusions: There was a low rate of LTI in among IBD patients in our setting. The concordance between the two tests in IBD patients in our series is poor, especially in vaccinated patients. 2 of 11 patients have been diagnosed of LTI only by a positive QFT-G-IT. QFT-G-IT can be a useful tool that can optimize the diagnosis of LTI.

## P125

Ultrasensitive C reactive protein is a marker of endoscopic relapse in patients with ulcerative colitis

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**Background:** The ultrasensitive C reactive protein (hs CRP) is a reactant of acute phase produced by hepatocytes and is regulated by interleukin 1, interleukin 6, tumoral necrosis factor and interferon. The use of hsCRP has been increased in the follow-up of patients with UC. The aim of this study was to determine the role of hsCRP as endoscopic relapse marker in patients with UC and to explore the correlation between hs-CRP and grade of disease activity as well as the IL-6 gene expression in colonic mucosa.

Methods: We evaluated a total of 450 patients with UC belonging to the IBD Clinic at the Instituto Nacional de Ciencias Médicas y Nutrición from January 2007 to December 2011. All patients with UC were in endoscopic remission at the basal colonoscopy and during the follow-up at least one colonoscopy was required. Full Mayo score and hs-CRP were evaluated. According to Mayo score, patients were grouped as remission mild, moderate, or severe activity. Demographic, clinical and laboratory tests were evaluated in all patients. IL-6 mRNA exprresion was measured from colonic mucosa by Real-time polymerase chain reaction (RT-PCR). The SSPS version 17.0 statistical package was used for the analysis.

**Results:** The mean age at diagnosis was  $31\pm7$  years old, 55.3% were female and 44.7% male. In relation to the extent of disease: 68.2% had pancolitis; 14.1% had distal colitis; 10.6% had proctosigmoiditis and 5.9% had left colitis. In 23.5% extraintestinal manifestations were present characterized by peripherical arthropathy, primary sclerosing colangitis, sacroileitis and uveitis. The medical treatment consisted of aminosalycilates all patients (100%); steroids in 30%, inmunomodulators in 25% and cyclosporin in 2%. The cutoff level of hsCRP was associated with the presence of endoscopic relapse without clinical disease activity: 0.34 mg/dL was associated with mild disease; 0.40 mg/dL for moderate disease and >0.65 mg/dL for severe disease. Nevertheless, 18% of the UC patients continued in endoscopic remission during the follow-up and the cut-off level of hs-CRP was below of 0.15 mg/dL. The levels of hs-CRP correlated significantly with the gene expression of interleukin 6 in the colonic mucosa (r = 0.88, P < 0.0001).

Conclusions: The hsCPR higher than 0.34 mg/dL is a factor associated with the presence of endoscopic relapse in patients with clinical remission of UC. Elevation of hsCRP correlated significantly with the grade of severity and the gene expression of IL-6 in the colonic mucosa.