

to 2011, were investigated about the presence of CMV on biopsy specimens of colon. In each patient we recorded: clinical activity; endoscopic extent; steroid-dependent/refractory status and ongoing therapies. PCR amplification technique was used for detecting CMV-DNA in colonic tissue. Clinical severity of IBD was assessed according to Mayo Scoring Index for UC and Harvey-Bradshaw Index for CD.

Results: The presence of CMV-DNA in colonic biopsies was detected in 14 out of 44 patients (13 UC; 1 CD), with an overall prevalence of 32%. 7 out of 14 CMV+ patients (50%) and 4 out of 30 CMV- patients (13%), showed clinically severe disease ($P < 0.05$). 28 patients were resistant/dependent to steroids. CMV was detected in 12 out of these 28 patients (43%), and in 2 out of the 16 (13%) patients steroid-responsive ($P < 0.05$). Considering the colonic extent of UC, among the 13 CMV+ patients: 2 had a rectosigmoiditis (16%), 5 had a left-sided colitis (38%) and 6 had a colitis extending beyond the left colonic flexure. Among the 17 CMV- patients: 5 had a rectosigmoiditis (28%), 4 had a left-sided colitis (25%) and 8 had a colitis extending beyond the left colonic flexure (47%). No significant statistical difference was found between these two groups. 16 out of 44 patients were under immunosuppressive treatment. Among these 16, 6 were CMV+ (38%) and 10 was CMV- (62%); among the other 28 patients, 8 was CMV+ (28%) and 20 was CMV- (72%). No significant statistical difference was found between these two groups.

Conclusions: CMV appears to play a role in a subgroup of patients with severe or steroid-refractory IBD. It is not clear whether the virus causes steroid dependence/refractory or a prolonged steroid use reactivates a latent viral infection. No correlation was found between the extent of UC, the immunosuppressive therapy and the presence of CMV-DNA in colonic tissue.

P.01.14

ULCERATIVE COLITIS IN REMISSION AND NEUROSENSORIAL HEARING LOSS (NSHL)

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Background and aim: Extra Intestinal Manifestations of Inflammatory Bowel Disease (IBD) involve 20–40% of all affected patients, but, at this moment, Neurosensorial Hearing Loss (NSHL) is little considered as extra-intestinal manifestations of IBD.

Material and methods: We studied 47 Ulcerative Colitis (UC) patients (27 males and 20 Females). We documented the patients' age, chronology of UC, severity of UC according to Mayo Scoring System, medical therapy, surgical treatment, family history of hearing loss, exposure to ototoxic medication, symptoms relative to hearing loss, vertigo, tinnitus. Every patient was subjected to Otoscopy and Audiometric Study by determining the PTA (Pure Tone Audiometry) thresholds levels from 500 Hz to 8000Hz.

Results: The Mean Age of UC patients was 37.5 year. 20 were affected by Pancolitis (11 males and 9 females), 20 by Left Colitis (11 males and 9 females) and 7 by Proctitis (5 males and 2 females). All patients were in remission (Mayo Score below 6- range 0–12). All patients were in Mesalazine therapy (1600–4000 mg/day) except 4 (3 males and 1 female) in Azathioprine therapy. In 1 female (2.1%), affected by Ulcerative Pancolitis and Gangrenosum Pyoderma in Azathioprine therapy, a bilateral Neurosensorial Hearing Loss (NSHL) was identified.

Conclusions: Neurosensorial Hearing Loss (NSHL) should be considered an immunologic extra-intestinal manifestation of IBD, particularly in Ulcerative Colitis also in remission but new studies are warranted.

P.01.15

EVALUATION OF CROHN'S DISEASE ACTIVITY BY DIFFUSION-WEIGHTED MAGNETIC RESONANCE IMAGING (MRI)

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Background and aim: A new application of MRI is the use of MR sequences DWI (Diffusion Weighted Imaging). These are characterized by a high resolution of contrast that allows to differentiate inflamed small bowel by normal bowel. The diffusion of water is the result of Brownian motion. Using the natural sensitivity of MRI to motion, is possible to measure the ADC (Apparent Diffusion Coefficient), a quantitative parameter of this phenomenon. In active Crohn's Disease (CD) the high viscosity and cellularity of inflamed tissue may reduce the extracellular space, so restricting the diffusion of water. The aims of this study were: to evaluate in patients with CD the diagnostic capability of DWI sequences in the detection of small bowel inflammation with the measurement of ADC and to verify the correlation between findings of DWI sequences (both qualitative and quantitative) and the Harvey-Bradshaw Index (HBI).

Material and methods: A retrospective search of our database was performed. We reviewed 14 patients with CD of terminal ileum (TI) who underwent MR enterography (including dynamic contrast enhanced MRI and DWI) between February 2010 and April 2012. Inclusion criteria were: histologic diagnosis of small bowel CD, HBI calculated within 1 month and colonoscopy performed within 2 months of MR examination. Conventional MRI findings of TI were recorded together with a semiquantitative evaluation of signal intensity in DWI sequences using a 3-point scale. Regions of interest were drawn over TI and normal ileum to calculate ADC.

Results: Among conventional MR findings, mural thickening and increased enhancement were present in all patients; ADC values differed significantly between actively inflamed TI and normal ileum [$(1.19 \pm 0.22) \times 10^{-3} \text{ mm}^2/\text{s}$ versus $(3.69 \pm 0.42) \times 10^{-3} \text{ mm}^2/\text{s}$; $P < 0.00001$]; the presence of a strong correlation between DWI images and HBI was demonstrated (r of Pearson=0.67; $p=0.009$); we did not find a significant correlation between ADC value of TI and HBI.

Conclusions: Our study confirms that DWI sequences are useful in distinguishing bowel segments with active inflammation from normal loops in patients with CD. The inflamed intestinal wall is characterized by restriction of diffusion and the ADC value of the segments with active disease is significantly lower than normal. The partial correlation between DWI sequences and HBI may show the usefulness of DWI-MRI in the evaluation of disease activity in CD.

P.01.16

ADALIMUMAB IS MORE EFFECTIVE THAN AZATHIOPRINE AND MESALAMINE AT PREVENTING POSTOPERATIVE RECURRENCE OF CROHN'S DISEASE – A RANDOMIZED TRIAL

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Background and aim: Postsurgical recurrence of Crohn's disease (CD) is very frequent and to date only Infliximab has been shown to be useful at preventing it. The efficacy of Adalimumab (ADA) is poorly known. We evaluated whether the administration of ADA after resective intestinal surgery reduces postoperative CD recurrence.

Material and methods: We randomly assigned 51 patients with CD who had undergone ileocolonic resection to receive after 2 weeks from surgery. ADA at the dose of 160/80/40 mg eow, azathioprine (AZA) at 2mg/kg day-1 or mesalazine (MESA) at 3g/day and they were followed up for 2 years. Patients underwent endoscopy and magnetic resonance imaging at 12 and 24 months, physical examination and blood tests every 2 months. The primary end point was the proportion of patients with endoscopic and clinical recurrence based on Rutgeerts score (endoscopic remission was defined by a score of i0 or i1 and recurrence by a score of i2, i3, or i4) and clinical recurrence grading scale (clinical recurrence was defined as a score of 2 or greater on a scale where 1 indicates absent, 2 mild, 3 moderate and 4 severe symptoms), respectively. Secondary end point was the assessment of quality of life by means of a previously validated questionnaire (inflammatory bowel disease questionnaire,