elevated CRP and future disease relapse, 10 opted for crossover to an increased dose of infliximab. 8 of these patients re-responded continuously thereafter, and 2 re-responded partially.
Conclusion: In ACCENT I patients clinically responding to scheduled infliximab therapy, an elevated CRP level indicative of subclinical inflammation was predictive of a future disease relapse. Response was re-established partially or completely in all those patients subsequently crossing over to a higher dose of infliximab. It is possible that more frequent relapse in these patients was driven by more rapid drug clearance, higher disease activity, or both. Further research is needed to investigate any causal relationship between these factors.

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DOES INTESTINAL INFLAMMATION TRIGGER OXIDATIVE STRESS IN EXTRACOLONIC TISSUES?

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Background & Aims: Localized colonic inflammation may be associated with malabsorption and altered motility in the small bowel. Whether proinflammatory cytokines released from the primary site of inflammation alter the function of remote organs such as mesenteric fat tissue, liver and also small intestine that are sensitive to inflammation is unknown. We aimed to evaluate the oxidative stress and cytokine expression in extracolonic tissues such as mesenteric fat tissue, small intestine and liver in an experimental model of colitis induced by trinitrobenzene sulfonic acid (TNBS) and treated by anti-tumor necrosis factor(TNF), Infliximab (IFX)
Methods: Colitis was induced by TNBS, intracolonic isotonic 0,9% saline was given to controls. On the third day 5 mg/kg intravenous (iv) infusion of IFX was given through jugular venous catather, while iv isotonic 0,9% saline was given to controls. 40 Sprague Dawley rats were divided into 4 groups. *1st group:* (n=10) TNBS colitis + iv IFX, *2nd group*: (n=10) TNBS colitis + iv isotonic saline, *3rd group*: (n=10) intracolonic isotonic saline + iv IFX, *4th group:* (n=10) sham group. On the 6th day rats were killed by decapitation, rectosigmoid colon, mesenteric fat tissue, small intestine and liver samples were removed. Oxidative stress was determined by measurement of myeloperoxidase (MPO) activity, malonyldialdehyde (MDA) and glutathione (GSH) levels in homogenisated tissue supernatants. TNF-alfa and IL-6 expression was evaluated immunohistochemically in the colon, mesenteric fat tissue, and small intestine.
Results: Colonic MPO and MDA levels were increased, GSH was decreased by induction of colitis. IFX administration lowered MPO and MDA levels but increased GSH ($p<0,001$). Similarly MPO and MDA levels in mesenteric fat tissue were increased, GSH was decreased ($p<0,05$) with colitis, but after administration of IFX, GSH level did not change whilst MPO and MDA levels ($p<0,05$) were decreased. MPO, MDA and GSH levels in small intestine and liver remained the same after colitis and IFX administration. In colonic and mesenteric fat tissues where oxidative stress was triggered, the immunoexpression of TNF-alfa and IL-6 was increased, and responded well to anti- TNF treatment.
Conclusion: In intestinal inflammation, increased oxidative damage in mesenteric fat tissue was identified firstly, but there was no damage in the small intestine and the liver. Oxidative stress stimulated proinflammatory cytokine expression. Mesenteric fat tissue is an important site for the release of proinflammatory mediators, that are involved in malabsorption and malnutrition in colitis.

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THE IMPACT OF DIFFUSION-WEIGHTED-MR IMAGING IN DETECTING AND STAGING ANORECTAL CROHN'S FISTULAS: COMPARISON WITH CONVENTIONAL MRI

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Introduction: Perianal fistulas occur in up to 45% of patients with Crohn's disease (CD). MR imaging (MRI) is the method of choice in depicting and classifying perianal fistulas. Diffusion-weighted-image (DWI) is an innovative MR technique providing physiologic information, i.e. restricted diffusion of protons in neoplastic or infectious tissues.
Aims & methods: The purpose of the present study was to assess in CD patients any additional, to conventional MRI, information provided by DWI with regard to depiction and staging of fistulas. Eighteen CD patients, 10 males (aged 19-57y, mean 29) and 8 females (26-59y, mean 51.5) with clinical suspicion of perianal fistulas underwent pelvic MRI. In all patients the following sequences in axial and coronal planes were applied: T1-w before and after intravenous contrast administration, fat suppressed T2-w TSE, STIR and DWI. The activity of perianal CD was scored clinically using the Perianal Crohn's Disease Activity Index (PDAI). The fistulas were assessed as for presence and enhancement. Apparent Diffusion Coefficient (ADC) maps were created and measured in the abnormal area.
Results: In 16 out of 18 patients (88.9%) there was accordance between the findings of conventional MRI sequences. In 2 patients (11.8%), fistulas were detected only on STIR, DWI and contrast enhanced T1-w images. Linear regression analysis between ADC values(range 115-176, mean 141,8) and PDAI (range 0-18, mean 7,8) did not show any significant correlation ($p>0.05$).
Conclusion: DWI seems to offer no additional information in the detection and staging of anorectal Crohn's fistulas compared to standard MRI techniques applied in our anorectal fistula imaging protocol.

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PREDICTIVE FACTORS OF BONE DENSITY LOSS IN IBD PATIENTS

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Aims: to evaluate osteoporosis prevalence in a group of tunisian patients with inflammatory bowel disease (IBD), and determine the predictive disease variables of impaired bone mineral density.
Patients and methods: a total of 80 IBD patients were prospectively enrolled; 48 patients with Crohn's disease (CD) and 32 with ulcerative colitis (UC). Bone mineral density was measured at the lumbar spine and left femoral neck by dual-energy X-ray absorptiometry (DXA). We used T score to express bone loss (osteopenia: $-2.5\ SD \leq T \leq -1\ SD$, osteoporosis: $T \leq -2.5\ SD$). The variables evaluated were: age, gender, BMI, smoking habit, type, location and duration of IBD, and the history of intestinal resection and cumulative dose of steroids.
Results: eighty patients were included (43 women, mean age= 29 years) Prevalence of femoral osteoporosis was 34.8% and 12% in CD and UC patients respectively and that of lumbar osteoporosis 30% and 15% respectively. Prevalence of osteopenia was equivalent in the two diseases (48% in CD, 42% in UC). Osteoporosis tended to be significantly more frequent in CD ($P = 0.03$) particularly with anoperineal lesions ($P=0.017$), in females ($P =0.003$), in patients with malnutrition (0.05). Finally, a significant association was found with the cumulative dose of steroids ($P= 0.04$).
Conclusions: osteoporosis is frequent in IBD patients, especially with Crohn's disease. Female gender, malnutrition (body mass index $\leq 20\ kg/m^2$), steroids cumulative dose, and anoperineal location are risk factors for bone mineral loss in IBD.

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INCREASED BONE RESORPTION AND LOWER BONE DENSITY IN MICROSCOPIC COLITIS

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Background: Microscopic colitis (MC) consists of collagenous and lymphocytic colitis. Both can cause non-bloody diarrhea. Osteoporosis is a common complication in inflammatory bowel diseases (IBD), especially in Crohn's disease (CD). Increased bone resorption is proved in CD.
Aim: Our aim was to evaluate the bone density and bone metabolism in patients with MC.
Patients and methods: Fourteen patients (12 women and 2 men, mean age: 49.79±13.06 years) were included into the study. Ten and 4 patients had lymphocytic and collagen colitis, respectively. Twenty eight age and gender matched healthy persons were enrolled as controls. Bone mineral density (BMD) was measured by dual x-ray absorptionmetry (Hologic QDR 4500C) above the lumbar spine, femoral neck and the non-dominant radius. Bone formation (osteocalcin-OC, normal range: 20-48 ng/ml) and bone resorption (beta-crosslaps - bCL; normal range:0-320 pg/ml) markers were determined by immunoassay (Elecsys, Roche). Results are presented in mean±SD format. Statistical analysis was performed using student t-test and Pearson correlation analysis.
Results: Decreased bone mineral density (BMD) was detected above the femoral neck and radius in MC compared to the healthy controls (0,852± 0,165 vs. 1,056±0,126g/cm^2; $p<0,01$) and (0,565±0,093 vs. 0,667±0,072 g/cm^2; $p<0,05$), respectively. Femoral (-0,638±1,437 vs. -0,211±1,053; $p<0,01$) and radius t-score (-1,37±1,135 vs. -0,882±1,106; $p<0,05$) was also decreased and in MC compared to the controls. Elevated mean bCL concentration was measured in MC compared to the controls (417,714±250,37pg/ml

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