Results: Patients with active IBD showed significantly reduced parameters in their PFT. Tiffeneau index-values (FEV1%) were significantly reduced in IBD patients with active disease (78.9/73.7/85.1) compared to controls (86/81.8/88.3; p = 0.001) and IBD patients in remission (84.5/81.2/89.4; p = 0.0002). No difference was found between IBD patients in remission and controls (p > 0.05). Parameters of peripheral airway obstruction (MEF75-25%) showed comparable changes (MEF75ibdactive vs. MEF75control p = 0.01; MEF75iabdactive vs. MEF75ibdremission p = 0.002). Clinically significant peripheral airway obstruction was seen in 19.1%, obstructive dysfunction in 12.8% and restrictive dysfunction in 2.1% of IBD patients with an active disease. Patients treated with anti-TNF showed a significant improvement of pulmonary obstruction (p = 0.003 FEV1%) compared to baseline levels.

Conclusions: IBD patients with active disease showed significant abnormalities in their PFT indicating pulmonary obstruction in comparison to healthy controls and IBD patients in remission. Anti-inflammatory therapy with anti-TNF improves obstructive abnormalities. Pulmonary obstruction and chronic broncho-pulmonary inflammation might be the cause of reduced exercise levels during active disease and may be overlooked in the majority of patients. Further studies are necessary to determine whether chronic obstruction should be treated and whether it contributes to the observed mortality from lung problems in IBD.

P157 Proximal disease extension and related predicting factors in ulcerative proctitis

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Background: Ulcerative colitis usually begins in the rectal mucosa, extends proximally to involve varying portions of the bowel, and can take multiple clinical courses. However, the risk of development of proximal extension have yet to be determined. The aim of this study was to evaluate both the natural course of disease and the risk factors influencing the proximal disease extension in ulcerative proctitis.

Methods: We retrospectively analyzed 98 patients with ulcerative proctitis at the time of diagnosis who were regularly followed and underwent sigmoidoscopy or colonoscopy between January 2000 and December 2007.

Results: The mean duration of follow-up was 109.2 ± 49.5 months. A total of 27 (27.6%) patients experienced proximal progression of disease extent during the follow-up period. Mayo scores were significantly higher in the extension group compared to patients whose ulcerative proctitis did not extend proximally (p < 0.001). Corticosteroid use at initial diagnosis (both topical and systemic) was also more frequent in the extension group (29.6% vs. 9.9%, p = 0.026). In addition, chronic, continuous disease activation within six months of the initial diagnosis was significantly higher in the extension group (p < 0.001), as was disease relapse and the number of hospitalizations over the entire follow-up period (p = 0.001, and p = 0.002).

According to multivariate analysis, disease extension after the initial diagnosis was associated with chronic disease activation, disease relapse, and hospitalization (p = 0.030, p = 0.042, and p = 0.044, respectively).

Conclusions: Increased severity of disease upon diagnosis of ulcerative proctitis was associated with a higher probability of proximal disease extension during the follow-up period. Moreover, those with disease extension were more likely to experience relapse and to be hospitalized, indicating poor prognosis.

P158 Prospective comparison of magnetic resonance imaging, rectal and perineal ultrasound and the surgical findings of complicated perianal Crohn’s disease: a new kid on the block

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Background: Magnetic resonance imaging (MRI) and rectal ultrasound (RUS) are the two accepted imaging modalities for the evaluation of perianal fistulas and abscesses. RUS requires high experience, while MRI is expensive and its urgent access is limited in many places. Although perineal ultrasound (PUS) is easy to learn and can be performed at any time, its diagnostic accuracy in complicated perianal Crohn’s disease (CD) had never been evaluated prospectively. The aim of our study was to compare the diagnostic sensitivity of MRI, RUS and PUS with the surgical findings of CD patients with perianal fistulas and abscesses.

Methods: Twenty-three patients with active perianal CD (12 women, 11 men, mean age: 36.7 years; current therapy: antibiotics in 69.6%, azathioprine in 56.5%, biologicals in 73.9%; frequency of previous surgery 26.1%; proportion of smokers 39.1%) were included in this prospective study. Fistulas were classified as simple (43.8%) or complex (52.2%). Perianal Disease Activity Index (PDAI) was estimated in every patient. All patients underwent MRI, RUS and PUS within a few days before perianal surgery. The sensitivities of the diagnostic modalities were compared with the surgical findings. Chi-square test was used to assess the value of the different imaging techniques in the evaluation of the type of fistulas.

Results: The mean PDAI was 8.43 (4–15). The sensitivities of MRI, RUS and PUS in the diagnosis of perianal fistulas were 82.6%, 82.6% and 100%, respectively. The sensitivities of MRI, RUS and PUS in the detection of abscesses were 92.3%, 69.2% and 91.3%. PUS was significantly more accurate in the diagnosis of the types of the fistulas than the others (78% vs. 69% and 69%, p = 0.025).

Conclusions: PUS is a very accurate and easy to perform diagnostic method with an outstanding sensitivity compared to MRI and RUS in the evaluation of complicated perianal CD. Due to its simplicity and low cost, PUS is recommended be the first diagnostic modality in case of complicated CD.
Prevalence of IBD among celiacs in our celiac centre

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Background: Celiac disease (CeD) and IBD are inflammatory disorders of the gastrointestinal tract with some common genetic, immunological and environmental factors involved in their pathogenesis. Several research shown that patients with CeD have a 10-fold risk of developing IBD when compared with that of the general population. The aim of this study is to determine the prevalence of IBD in our celiac patient cohort over a 15-year-long study period.

Methods: In order to diagnose CeD, tissue transglutaminase antibody testing (tTg) and endomysoy antibody tests (EMA) were used for serology, and duodenal biopsy samples were taken to determine the degree of mucosal injury described according to the modified Marsh classification. To set up the diagnosis of IBD, clinical parameters, imaging techniques, colonoscopy, video capsule endoscopy and histology were applied. Dual energy X-ray absorptiometry for measuring bone mineral density (BMD) was performed on every patient.

Results: In our material, 8/245 (3.2%) CeD patients presented IBD (4 males, mean age 37, range 22-67), 6/8 Crohn (CD), and 2/8 ulcerative colitis (UC), retrospectively. In 5/8 patients the diagnosis of CeD was made first and IBD was identified during follow-up. The average time period during the set up of the two diagnosis was 10.7 years (median: 5 years, range 4.5-35 months). Serology for CeD was positive in all cases (2/8 tTG 6/8 EMA). The distribution of histology results according to Marsh classification: 1/8 M1, 2/8 M2, 3/8 M3a, 2/8 M3b. The distribution according to the Montreal classification: 4/6 CD patients are B1 (nonstricturing, nonpenetrating), 2/6 CD patients are B2 (stricturing), 1/2 UC patient is S2 (moderate UC) and one UC patient is S0 (clinical remission). Biological therapy (infliximab) was administered to 2/8 patients. Normal BMD was detected in 2/8 (25%) case, osteopenia in 4/8 (50%) patients, and osteoporosis in 2/8 (25%) patients, respectively. The mean BMI for males was 22.25 kg/m², whereas the mean BMI for females was 20.74 kg/m².

Conclusions: Within our cohort of patients with CeD, IBD was significantly more common (3.2%) than in the general population. Diagnosis of CeD mostly preceded the diagnosis of IBD. The dominant behaviour of IBD was of the inflammatory type. Interestingly, the loss on BMD for these patients with two different disease leading to malabsorption syndrome were not worse than for those suffering in only one of these disorders.

P160

Prevalence of IBD among celiacs in our celiac centre

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P161

Presence of stenosing and penetrating lesions at MRI but not deep ulcers at endoscopy predicts surgery requirements in CD in the era of biologics

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Background: Severe endoscopic lesions (SEls) in colonic Crohn’s disease (CD) patients have been related with higher risk of colectomy and penetrating complications. The aim of our study was to re-assess the influence of SEls on surgery requirements in CD patients and compare it with the predictive capacity of magnetic resonance imaging (MRI). The influence of treatment on disease course was also determined.

Methods: CD patients from a single reference center undergoing simultaneous evaluation with endoscopy and MRI in the context of two prospective studies (2006–2011) were included. Baseline assessment of clinical activity, biomarkers, colonoscopy (CDEIS Score, diagnosis of SEls and MELS) and MRI (ulcers, stenosis and fistulae diagnosis, MacRIA Score) was performed. Patients were followed up until surgery or the end of follow-up. SEls were defined as deep ulcerations covering >10% of mucosal area of at least one segment of ileum-colon and MELS as any endoscopic lesions not defined as SEls.

Results: From 116 patients included, 109 were followed up after initial evaluation. CD location was ileal (29%), colonic (32%) and ileocolonic (39%). Ulcers (severe or superficial) were present in 83% patients at baseline colonoscopy (SEls in 44%), stenosis in 35% and pseudopolyps in 17%. At baseline MRI, ulcers were identified in 70% patients, stenosis in 25% and fistulae in 17%. During follow up (median 50 months), 72% patients received anti-TNF drugs and 29 patients (27%) underwent surgery, 23/29 within the first 2 years after inclusion. Indication for surgery was stenosis in 13 cases (45%), fistulizing complication in 7 (24%), perforation in 3 (10%), inflammatory activity in 3 (10%), dysplasia in 1 (3%) and others in 2 (7%). Risk of surgery was higher in Montreal A1 (diagnosed before 16 years, p = 0.02), Montreal B2 and B3 (stenosing and fistulizing behavior, p < 0.001), in patients with perianal disease (p0.02) and in those with longer CD duration (p = 0.006).

Surgery requirements were not related with the presence of deep ulcers at baseline endoscopy (23% SEls vs 30% no SEls) or MRI (29% ulcers vs 21% no ulcers), but detection of stenosis