different 5-ASA (Pentasa®) dosages (2 gr/day followed by 4 gr/day) on thiopurine metabolism. IBD patients on monotherapy thiopurines were included and received consecutively the 2 different 5-ASA regimes, 6-Thioguaninenucleotide (6-TGN), 6-methylmercaptopurine (6-MMP), 5-ASA and N-acetyl-5-aminosalicylic acid (N-5-ASA) levels were determined before 5-ASA therapy (t=1), after 4 weeks of 2 gr/day (t=2), after 4 weeks of 4 gr/day (t=3) and after at least 4 weeks after cessation of 5-ASA therapy (t=4). In addition, routine laboratory parameters were determined.

Results: Twenty-six IBD patients (42% male and 58% CD) on steady state monotherapy were included. Mean 6-TGN levels during the different regimes were 243 (t=1), 326 (t=2), 396 (t=3) and 286 (t=4) pmol/8 th per day (t=3) and after at least 4 weeks following 5-ASA therapy (t=4). In addition, routine laboratory parameters were determined.

Results: Six-TGN levels increased statistically significant with 45% (t=2) and 70% (t=3), respectively. No statistically significant variations in 6-MMP levels were observed. No correlations were established between 5-ASA and thiouropurine metabolites. Two patients (8%) developed a leucopoenia (2.4 × 10^3/l) that resolved spontaneously.

Conclusion: This pharmacokinetic study shows that 6-TGN levels increase in a dose-dependent manner during 5-ASA co-administration. However, 5-ASA has no influence on 6-MMP levels which reflect TMT activity. Our results warrant further studies on 5-ASA use in IBD patients who develop inadequate 6-TGN levels during thiopurine therapy as well as to the pharmacodynamics

**P110 CYTOMEGALOVIRUS AND EBSTEIN-BARR VIRUS PRIMO INFECTIONS IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE**


Cytomegalovirus (CMV) and Epstein-Barr virus (EBV) primo infections (PI) can be symptomatic and severe in patients under immunosuppressants. Our aim was to report clinical and biological presentation of CMV and EBV PI in our cohort of inflammatory bowel disease (IBD) patients.

Patients and method: A retrospective analysis of CMV and EBV PI was performed. Cases were identified using our computerized data base of 3551 IBD patients.

Results: Fifteen cases of viral PI (CMV=11, EBV=4) were identified. Eleven patients had Crohn’s disease, 2 had ulcerative colitis and 2 had indeterminate colitis. IBD was quiescent in 11 patients. Twelve patients were under immunosuppressants (azathioprine/6-mercaptopurine, n=9; methotrexate, n=3) and/or steroids (n=3). Lymphopenia (≤500/mm³) was noticed in only one patient 6 months before PI. Diagnosis delay after onset of symptoms was 20 days (5-184). CMV PI diagnosis relied on presence of IgM in 9 patients and seroconversion in 2 patients. EBV PI diagnosis was performed by positive MNI test (n=1) or presence of IgM anti-VCA (n=3). Fever (38°C - 40°C) was present in all patients and lasted 22 days (14 to 33 days). Other symptoms and/or clinical manifestations were: cervical adenomegaly (n=6), splenomegaly (n=5), headache (n=5), cough (n=4), abdominal pain and diarrhoea (n=4), rash (n=2), joint pain (n=2), dyspnea and hypoxia (n=1). Abnormal biological results were: moderate hepatic cytolysis (n=11), cholestasis (n=10), lymphopenia (<1000/mm³) (n=8), monoclonous syndrome (n=8) and hemophagocytic syndrome (n=3). Exacerbation of colitis was noticed in only one patient. Immunosuppressants were stopped in 10 patients, and 3 patients with CMV PI received antiviral treatment. Outcome was finally favourable in all patients.

Conclusion: In our cohort of IBD patients, symptomatic CMV and EBV PI were diagnosed mainly in patients under immunosuppressants (80%). CMV and EBV PI should be suspected in IBD patients under immunosuppressants and long lasting fever.

**P111 CONTRAST-ENHANCED ULTRASOUND IN THE DIAGNOSIS OF INTRAABDOMINAL INFLAMMATORY MASSES COMPLICATING CROHN’S DISEASE. A PROSPECTIVE COMPARISON WITH COMPUTED TOMOGRAPHY**

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Background and aims: Intraabdominal inflammatory masses (IIM), are common findings in Crohn’s disease (CD) usually arising from transmural inflammation and fistulae, and resulting in phlegmons and abscesses. The early detection and correct diagnosis of these complications usually rely on different imaging techniques, such as ultrasound (US) and computed tomography (MDCT), whose diagnostic accuracy, in particular for smaller lesions, is still controversial. Contrast-enhanced US (CEUS), which images the vascularisation of the lesions, could be usefully used in the diagnosis of these lesions. This prospective study aimed to assess the accuracy of US and CEUS compared to multidetector helical CT (MDCT) and the reproducibility of US, CEUS and MDCT in differentiating abscesses from phlegmons complicating CD. We also evaluated whether US, clinical and biochemical features are useful in suggesting the correct diagnosis of the lesions.

Methods: 31 CD patients with IIM, suspicious for abscess or phlegmon at conventional US, were investigated by CEUS (intravenous injection of 4.8 ml Sonovue, mechanical index 0.08, Esato Esonate) and MDCT. Images and videos of US, CEUS and CT of each examination were recorded and blindly reviewed by 3 expert radiologists who reached a diagnosis (abscess or phlegmon). Agreement on the results of CT by 2 radiologists was considered the reference standard. Agreement of the radiologists within the 3 diagnostic modalities was estimated using K-statistics.

Results: 12 abscesses and 19 phlegmons were found. Sensitivities of US and CEUS for abscesses by the 3 radiologists were 42.8%, 64.2%, 71.4% and 85.7%, 78.5%, 85.7%, respectively. The specificities were 70%, 66.7%, 60% with US and 90%, 70%, 80% using CEUS. The mean K-values for concordance in the diagnosis of abscesses using US, CEUS and MDCT were 0.50, 0.73 and 0.73 US (i.e. size, echopattern), clinical and biochemical features (i.e. CD activity, C-reactive protein) were not statistically different in patients with abscesses and phlegmons.

Conclusion: CEUS is useful in differentiating abscesses and phlegmons in CD, showing a reproducibility comparable to that of MDCT. Conventional US, biochemical and clinical features are of limited value in differentiating IIM complicating CD.

**P112 TRANSCUTANEOUS PERIANAL ULTRASOUND IN THE DETECTION OF PERIANAL, ANOVULVAR AND RECTOVAGINAL FISTULAE IN CROHN’S DISEASE**

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Background and Aims: Perianal and rectovaginal fistulae are common complications in Crohn’s disease. Magnetic resonance imaging (MRI) of the pelvis as well as endoanal ultrasound (EUS) are frequently used for imaging of perianal fistulae, sinus tracts or abscesses but both imaging methods require fairly expensive equipment and experienced investigators. Trascutaneous perineal ultrasound (TPUS) may represent another method of detecting perianal complications in Crohn’s disease. We investigated Crohn’s disease patients with perianal or rectovaginal fistulae or perianal abscesses using TPUS and compared the detected pathology with results of EUS as the reference standard.

Patients and methods: We performed TPUS in 29 patients (14 female; mean age: 36.5 years) with Crohn’s disease and perianal and/or rectovaginal fistulae or abscess. On the same day, these patients underwent TPUS and EUS as the reference standard. Agreement of the radiologists within the 3 diagnostic modalities, could be usefully used in the diagnosis of these lesions. Video clips of US, CEUS and CT of each examination were recorded and blindly evaluated whether US, clinical and biochemical features are useful in suggesting the correct diagnosis of the lesions. Presence of abscesses was also reported.

Results: 34 fistulae (3 intrasphincteric, 15 transsphincteric, 8 suprasphincteric and 8 anovulvar or rectovaginal) were detected by TPUS. Abscesses were detected in 6 cases. EUS confirmed the presence of all fistulae and the correct classification in 88.6%. Five of the 6 abscesses detected by TPUS could be confirmed also by EUS. One small abscess was not detected by EUS since it was in the gluteal region. No other abscesses were detected by EUS.

Conclusions: TPUS is a simple, painless, real-time method that can be performed without specific preparation to detect and classify perianal and rectovaginal fistulae and/or abscesses in Crohn’s disease patients with comparable sensitivity to EUS.