control arm, RR=1.06 (95% CI 0.93–1.21). Treatment-related AEs occurred in 1% (95% CI 0–7) of MSC-treated patients (12 studies). In RCTs treatment-related AEs (e.g. anal abscess and pain) occurred in 13% (95% CI 5–24) in the MSC and 24% (95% CI 14–35) in the control arm, RR 0.65 (95% CI 0.44–0.98). No deaths occurred.

Conclusions: Based on the current state-of-the-art, local administration of MSCs appears safe and efficacious. Limited large-scale controlled studies exist; further clinical trials with rigorous reporting of endpoints are required to ensure the correct positioning of this new therapeutic tool in the management of perianal CD.

**P682**

Role of laboratory markers in paediatric inflammatory bowel disease

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Background: Non-invasive methods for objective assessment of disease activity are particularly valuable in paediatric patients with inflammatory bowel disease (IBD). The aim of this study was to evaluate the utility of 6 blood tests—white blood cell (WBC) and platelet (PLT) counts, erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), fibrinogen and albumin, and 2 faecal markers—faecal alpha-1-antitrypsin (fA1AT) and faecal calprotectin (FC) to distinguish patients with endoscopic inflammation despite having no symptoms from patients in deep remission.

Methods: Thirty-one children with ulcerative colitis (UC) and 22 children with Crohn’s disease (CD) in clinical remission provided blood and faecal samples for evaluation of WBC, PLT, ESR, CRP, fibrinogen, albumin, fA1AT and FC. Endoscopic disease activity was assessed according to the Mayo endoscopic subscore (MES) and Simple Endoscopic Score for Crohn’s disease (SES-CD) in UC and CD patients, respectively.

Results: In UC children only FC and fA1AT were able to distinguish between patients with intestinal inflammation and endoscopic remission. Median levels for intestinal inflammation vs. endoscopic remission were (1000 µg/g vs. 100 µg/g, p < 0.001) for FC and (560 µg/g vs. 480 µg/g, p = 0.032) for fA1AT. In CD children only FC and fibrinogen were able to distinguish between patients with intestinal inflammation and endoscopic remission. Median levels for intestinal inflammation vs. endoscopic remission were (808 µg/g vs. 97 µg/g, p < 0.001) for FC and (435 mg/dl vs. 327 mg/dl, p = 0.032) for fibrinogen.

Conclusions: FC is a useful non-invasive marker of intestinal inflammation that may assist the follow-up of paediatric IBD patients.

**P683**

Maintenance of deep remission in patients with ulcerative colitis treated with thiopurines after withdrawal of the drug: Perspective real-life experience of a single centre

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Background: There are few data on long-term outcome of patients with ulcerative colitis after thiopurines withdrawal. Our aim was to analyse the outcome after thiopurines withdrawal for sustained remission and to identify predictors of relapse in a homogeneous cohort of patients with ulcerative colitis.

Methods: A Retrospective study was performed. A total of 59 patients with UC who discontinued thiopurines for stable clinical and endoscopic remission were included. For all patients were recorded both clinical and endoscopic data, the use of steroids at baseline, at the time of withdrawal of the drug, after 12 and 24 months from withdrawal and at the end of follow-up.

Results: The cumulative rate of recurrence was found to be 18.6% at follow-up. All patients who have relapsed during follow-up, had a recurrence after at least 12 months after discontinuation of therapy. The recurrence rate at 24 months was 6.7%. The early relapse was recorded at 15.9 months, the median time to relapse was 138.8 months (range 116.3–161.3). The duration of therapy with immunosuppressant in the study population was 61 months (IQR 47.5–73). On multivariate analysis predictors of relapse were: patients with chronically active disease at the beginning of the treatment [HR 16.64 (C.I. 2.21–125.1) p < 0.006] and patients with mayo clinical score > 1 < 2 at the time of discontinuation of the drug [HR 3.48 (C.I. 1.54–7.89) p < 0.003].

Conclusions: If administered at correct dose and timing, thiopurine therapy is able to maintain remission long after withdrawal. Patients with chronically active UC have greater risk of relapse and should be treated early with biologic agents.

**P684**

Sleep disturbances in IBD patients without sedative therapy

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Background: Sleep disturbances are commonly reported in IBD patients, although it is unclear whether sleep fragmentation induces the debut of IBD or it is more likely a modifiable factor, potentially leading to disease exacerbation, consequently an effect of disease.

Methods: An observational study was performed to assess the correlation between the quality of sleep and disease activity in IBD patients without a sedative therapy. The study included 33 subjects with IBD, admitted consecutively in the Gastroenterology Department, and sleep quality was assessed by the same investigator using Pittsburgh Sleep Quality Index (PSQI), considering the upper normal value a PSQI score of 5. Disease activity was evaluated through MAYO score/ CDAI and also by serological markers of inflammation, the assessment of endoscopic activity and histological degree of inflammation.

Results: Only 12.12% of the evaluated patients were in clinical remission, whereas the rest of the examined patients had mild to moderate disease activity. 88% of the patients with histological evidence or serological markers of inflammation on recent ileocolonoscopy also had abnormal PSQI scores (median PSQI score of 9), which were independent of their clinical disease activity status. There was no correlation between the PSQI score with the diseases type (Crohn’s disease, ulcerative colitis, proctitis) (p > 0.05). Most of the patients (66.67%) with clinically active disease declared sleep maintenance insomnia, whereas sleep quality was less influenced (21.2%) by digestive symptoms associated with IBD in this patient category.

Conclusions: There is a strong association between clinically active IBD and poor sleep quality, independent on sleeping disturbances.