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**Histological indices in ulcerative colitis - useful in predicting long-term recurrence?**

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**Background:** In ulcerative colitis (UC) patients in clinical remission and with mucosal healing, the persistence of histological activity has been associated with worse clinical outcomes, namely higher risk of relapse. Two histological activity indexes ([Nancy index (NI) and Robarts histological index (RHI)]) have recently been validated. We aimed to assess histological activity in this subgroup of patients using these validated indexes and determine their ability to predict long-term disease relapse.

**Methods:** Prospective study of a cohort of UC patients in clinical (<3 nonbloody bowel movements) and endoscopic (Baron score 0–1) remission in 2010–2011 followed for >4 years. Demographic, clinical, and endoscopic data were collected. Histological indexes were determined for each patient at inclusion and at the end of follow-up. NI ranges from 0–4 and RHI varies between 0–33, with scores >1 indicating active disease.

**Results:** Thirty-nine patients were included, 64.61% female, with a mean age of 61.5 ± 13.6 years. The majority had extensive colitis (48.7%) and left-sided colitis (33.3%). Maintenance therapy included 5-ASA (100%), thiopurines (23.1%) and biologics (15.4%). Histological active disease was present in 28.2% and 10.4% of patients using the NI and RHI scores respectively. The mean follow-up time was 6.15 ± 0.9 years. During this period, 15 patients (38.5%) had a clinical and/or endoscopic relapse. There was no significant difference in NI or RHI between patients who presented a relapse during the follow-up period compared with those who remained in remission. None of the scores were able to predict relapse or need for hospitalisation in this sample. There was a significant correlation between NI and the UCEIS endoscopic score (Spearman’s rho 0.44, p = 0.047).

**Conclusions:** In our cohort, 28.2% of patients in clinical and endoscopic remission had signs of histological activity. Histological activity evaluated by NI and RHI was not able to identify UC patients in clinical and endoscopic remission at risk of long-term relapse or hospitalisation at 6 years of follow-up. Larger prospective studies are needed to clarify this issue.

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**Diagnostic accuracy of ultrasonography in the detection of postsurgical recurrence in Crohn’s disease: A systematic review with meta-analysis**

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**Background:** The postoperative course of Crohn’s disease (CD) is best predicted by ileocolonoscopy. Ultrasonography (US) has been proposed as an indicator for postsurgical recurrence (PSR), but further confirmation is needed. We performed a systematic review with meta-analysis to assess the pooled diagnostic accuracy of US in the evaluation of PSR.

**Methods:** The systematic review was performed in PubMed/MEDLINE, EMBASE, SCOPUS and Cochrane databases to identify studies assessing the US accuracy in the PSR diagnosis. A sub-analysis between bowel sonography (BS), small intestine contrast ultrasound (SICUS) and contrast-enhanced ultrasound (CEUS) was performed. Pooling was performed using diagnostic fixed or random-effect model and bivariate analysis according with heterogeneity.

**Results:** Ten studies (536 patients) met the inclusion criteria. There was no significant publication bias. The pooled sensitivity and specificity of US in detecting PSR were 0.94 (95% CI 0.86–0.97) and 0.84 (95% CI 0.62–0.94) (overall diagnostic accuracy 90%). At sub-analysis, pooled sensitivity and specificity were: 0.82 (95% CI 0.76–0.88) and 0.88 (95% CI 0.74–0.95) for BS; 0.99 (95% CI 0.99–1.00) and 0.74 (95% CI 0.73–0.74) for SICUS. Furthermore, an SROC curve was built to establish the best BWT cut-off able to predict the presence of severe PSR (Rutgeerts ≥3): a BWT≥5.5 mm at US revealed: sensitivity 83.8% (95% CI 73.6%–90.6%), specificity 97.7% (95% CI 93%–99%), whereas a BWT≥7 mm had 100% specificity.

**Conclusions:** US shows high sensitivity and specificity for the diagnosis of PSR. SICUS appears more sensitive but less specific-than BS, while the role of CEUS needs further investigation. A cut-off value of BWT≥5.5 mm is strongly indicative of severe PSR, while a BWT≥7 mm could replace ileocolonoscopy.

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**Day of admission results predict outcome in acute ulcerative colitis**

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**Background:** Intravenous steroids remains the standard first-line treatment for patients with acute ulcerative colitis (UC). However, 30% of patients fail to respond and require second line therapies and/or surgery. The purpose of this study was to determine whether day 1 parameters could identify a group at high risk of failing first-line therapies.

**Methods:** All admissions for acute UC (ICD-10 K51) to hospitals within NHS Lothian (4 sites) from 1st November 2015 to 31st October 2016 were obtained from the regional coding department. Inclusion was limited to patients with UC as the primary reason for admission. Case record review confirmed diagnosis and clinical data were collected. Response to steroids was defined as discharge from hospital with no further acute medical or surgical treatment. The following parameters were recorded up to the first 10 days post admission: haemoglobin, platelet count, CRP, albumin, stool frequency, faecal calprotectin and abdominal x-ray results. Each patient was later attributed a score based on CRP (<50 mg/dl = 0; >50 mg/dl = 1), albumin (<30 g/l = 0; <30 g/l = 1) and platelets (<450 × 10⁹/l = 0; >450 × 10⁹/l = 1).

**Results:** From 1st November 2015 to 31st October 2016 sixty-one admissions with acute UC were identified; 37 (60%) of which...