

Conclusions: Positive histological margin, as defined by the presence of erosion, ulceration, chorion infiltration by neutrophils polynuclears, cryptic abscesses or cryptitis, was associated with an increased risk of clinical and surgical recurrence after ileocaecal resection for Crohn's disease.

P693

Vedolizumab treatment for pouch inflammation

A. Hirsch^{*1}, H. Tulchinsky², N. Maharshak¹

¹Tel Aviv Medical Center, Gastroenterology and liver diseases, Tel Aviv, Israel, ²Tel Aviv Medical Center, Department of Surgery, Tel Aviv, Israel

Background: Pouchitis is the most common complication in UC patients following total proctocolectomy with ileal pouch anal anastomosis surgery, with a reported cumulative prevalence ranging from 23% to 46%. Oral antibiotic therapy is the mainstay treatment, however, 10–15% of patients with pouchitis develop chronic antibiotic-dependent/refractory pouchitis or Crohn's-like disease of the pouch (CLDP) requiring treatment escalation to immuno-modulatory or biologic therapy. Our aim was to evaluate the safety and efficacy of vedolizumab in patients with antibiotic-dependent/refractory pouchitis.

Methods: We performed a retrospective chart review of patients with chronic antibiotic-dependent or refractory pouchitis who were treated with vedolizumab (300 mg at week 0, 2, 6 and 14) and were followed at the Tel Aviv Medical Center. Data collected included demographics, Pre and post-pouch therapy, modified pouch disease activity index (mPDAI) and serum C-reactive protein (CRP). The effectiveness of vedolizumab treatment was based on mPDAI and CRP level at Weeks 14 and 22.

Results: We identified 10 patients (7 males, median age 58 years) after IPAA with chronic antibiotic-dependent or refractory pouchitis, who were treated with vedolizumab; their baseline characteristics shown in Table 1. Of these patients, 7 had concomitant pre-pouch ileal inflammation and 3 had cuffitis. Six of these patients were previously treated with TNF-inhibitors for their pouch inflammation. The mean mPDAI dropped from 6.7 (range 5–10) to 3.6 (range 2–7), this was statistically significant ($p = 0.05$), as shown in Table 2 and graph 1. CRP levels remained stable throughout Week 22 (mean 9.85, range 2.1–20.7). No serious side effects were recorded, and all patients were off antibiotic therapy.

Conclusions: Vedolizumab is both safe and effective in patients with antibiotic-dependent/refractory pouchitis, and in patients with concomitant pre-pouch ileitis.

P694

Genetic predisposition and thiopurine-induced pancreatitis in inflammatory bowel disease patients

G. Burnet^{*1}, N. de Suray², B. De Vroey³, P. Hoang⁴, J.-C. Coche⁵, M. Denis¹, J.-L. Gala⁶, O. Dewit¹

¹Cliniques Universitaires St-Luc, Gastroenterology, Brussels, Belgium, ²Grand Hôpital de Charleroi, Gastroenterology, Charleroi, Belgium, ³Centres Hospitaliers Jolimont, Gastroenterology, Haine-Saint-Paul, Belgium, ⁴Clinique Sainte-Elisabeth, Gastroenterology, Namur, Belgium, ⁵Clinique St Pierre, Gastroenterology, Ottignies, Belgium, ⁶Université Catholique de Louvain, Centre de Technologies Moléculaires Appliquées, Institut de Recherche Expérimentale et Clinique, Brussels, Belgium

Background: Thiopurines, Azathioprine and 6-Mercaptopurine, remain an important treatment in both Crohn's disease (CD) and ulcerative colitis but are responsible for several side effects, such as acute pancreatitis (AP) in 3 to 7% of cases. The underlying mechanism of this dose-independent immune-mediated allergic reaction is still unknown. Genetic variability of enzymes intervening in thiopurine metabolism is known to influence adverse events linked to thiopurines. Results for inosine triphosphate pyrophosphatase (ITPA) are controversial. Recent studies on HLA polymorphism demonstrated a significant link between single-nucleotide polymorphism (SNP) rs2647087 and thiopurine-induced pancreatitis (TIP).^{1,2}

Methods: Out of 59 patients from five Belgian hospitals with a history of TIP, 42 met the eligibility criteria for AP linked to thiopurine with a positive temporal relationship (< 4 weeks after thiopurine exposure) and exclusion of other causes of AP. A fully custom PCR amplicon-based target enrichment kit was developed based on the TruSeq Custom amplicon (TSCA) technology from Illumina (Illumina, San Diego, CA, USA). The design of the kit targeted ITPA, HLA-DQA1-HLA-DRB1, but also ABCC4, TPMT, MTHFR and GSTM1, known to intervene in thiopurine metabolism.

Results: Our cohort showed high rates of known risk factors for TIP such as CD (88.1%), women (73.8%) and smoking habits (50%). AP were mild or moderate and no early or late complication regarding AP was reported. Hospitalisation rate was 42.9% with a median stay of 6.1 ± 5.43 days. No significant link between ITPA, ABCC4, TPMT, MTHFR, GSTM1 polymorphism and TIP could be found. However, in this cohort, SNP rs2647087 located on HLA-DQA1-HLA-DRB1, was found in high proportions (Allele frequency (AF)=0.476). This AF is similar to Heap et al.'s findings (AF = 0.48–0.49) who demonstrated a significant link between this SNP and TIP (OR = 2.59, $p = 2 \times 10^{-16}$) [1] and slightly lower than Wilson et al.'s results (AF = 0.69) (OR = 15.83, $p = 0.0001$).²

Conclusions: TIP is a serious adverse event with important rate and duration of hospitalisation. Prevalence for HLA variant rs2647087 in this TIP cohort is significantly high. Results are similar than in previous studies where heterozygous and homozygous variants experienced a significant increased risk of TIP. Genotyping rs2647087 could be implemented in daily practice when discussing treatment options. Together with TPMT testing, it could be an interesting tool for guiding the physician and the patient in deciding whether or not it is appropriate to initiate thiopurine therapy. No association between ITPA polymorphism and TIP was observed.

References

1. Heap GA, Weedon MN, Bewshea CM, et al. HLA-DQA1-HLA-DRB1 variants confer susceptibility to pancreatitis induced by thiopurine immunosuppressants. *Nat Genet* 2014;46:1131–4.
2. Wilson A, Jansen LE, Rose RV, et al. HLA-DQA1-HLA-DRB1 polymorphism is a major predictor of azathioprine-induced pancreatitis in patients with inflammatory bowel disease. *Aliment Pharmacol Ther* 2018;47:615–20.

P695

Feasibility and safety of strictureplasties performed by laparoscopic approach for complicated Crohn's disease: A prospective observational cohort study

G. M. Sampietro¹, F. Colombo^{*1}, A. Frontali², C. Baldi¹, L. Conti¹, D. Dilillo³, P. Fiorina⁴, G. Maconi⁵, S. Ardizzone⁵, F. Corsi⁶, G. Zuccotti³, D. Foschi¹

¹Luigi Sacco University Hospital, General Surgery, Milano, Italy, ²Hôpital de Paris (AP-HP), Beaujon Hospital, University Denis Diderot, Department of Colorectal Surgery, Pôle des Maladies de l'Appareil Digestif (PMAD), Paris, France, ³Luigi Sacco University Hospital, Division of Pediatrics, Milano, Italy, ⁴Luigi Sacco University Hospital, Division of Endocrinology, Milano, Italy, ⁵Luigi Sacco University Hospital, Gastroenterology, Milano, Italy, ⁶ICS Maugeri, General Surgery Department, Pavia, Italy

Background: Laparoscopy (LP) is considered the gold standard for the surgical treatment of complicated Crohn's disease (CD). Conventional and non-conventional stricturoplasties (SP) are indicated as a valid alternative to resection for fibrotic strictures, but such a complex and often multiple suturing has been considered until now the prerogative of open surgery. Since no data are available in the literature, aims of the present study is to assess feasibility and safety of SP performed by laparoscopic approach.

Methods: Data of all the patients undergoing surgery for CD were entered into our prospective database (ProSaDS-CD). A prospective protocol for laparoscopic approach was started in 2007. We compared patients treated by LP and by open approach (OP) in terms of preoperative patients' characteristics; number, site, and type of diseased segments; surgical procedure; perioperative complications and long-term results. All the consecutive, unselected patients with at least one small bowel location of CD at primary surgery were included. Pure colonic or recurrent disease were exclusion criteria. Clavien–Dindo classification was used for postoperative complications. Follow-up was performed at 3, 6 and 12 months after surgery, and then every year or in case of necessity.

Results: Between January 1995 and January 2018, 1166 patients entered the ProSaDS-CD. 557 met the inclusion criteria. LP and OP groups consisted of 297 and 260 patients, respectively. Overall conversion rate was 5.3%. Postoperative recovery was faster, and duration of surgery and hospital stay shorter in VL group ($p < 0.05$). Morbidity (Clavien–Dindo III or IV) and mortality rates were 4.3% and 0.3% in VL group and 4.2% and 0.7% in OP group (ns). No differences were present in terms of patients' history and clinical characteristics. In VL group 653 segments were involved (min 1 – max 25), and 290 bowel resections (52.3%), 146 conventional SP (26.4%), and 118 non-conventional SP (21.3%) were performed. In OP group were performed 228 bowel resections (46.4%), 143 conventional SP (29%), and 121 non-conventional SP (24.6%), for a total of 468 locations (min 1 – max 21) (ns). The mean length of diseased bowel, resection, and bowel sparing were 30.5 ± 26.2 cm, 23.6 ± 17.5 cm, and 23.3% (VL); and 24.5 ± 20.3 cm, 19.3 ± 14.5 cm, and 20.8% (OP) (ns). Mean follow-up was 6.3 ± 3.2 years.

Conclusions: This is the first study comparing the use of SP in open and laparoscopic surgery. No differences were found in term of safety and efficacy, number and type of SP, and bowel sparing. VL group had faster recovery and shorter duration of surgery and hospital stay.

P696

Long-term prognosis and predictive factors for surgical treatment of intestinal lesions in patients with Behcet's disease

T. Chohnoh, K. Watanabe, T. Minagawa, R. Kuwahara, Y. Horio, H. Sasaki, T. Bando, M. Uchino, H. Ikeuchi
Hyogo College of Medicine, Inflammatory Bowel Disease, Nishinomiya, Hyogo, Japan

Background: Behcet's disease with intestinal lesions, known as intestinal Behcet's disease (Int BD), is a manifestation of the disease that is often treated with immunosuppressive therapy, such as anti-tumour necrosis factor (TNF) α agents. However, some with Int BD cases are refractory to medical treatment and require surgery, though predictive factors indicating that have yet to be established. The aim of this study was to evaluate predictive factors for surgery (in principle, hand-sewn end-to-end anastomosis) as well as long-term prognosis in patients with Int BD.

Methods: Int BD was diagnosed according to the Japanese diagnostic criteria for BD. This single-centre retrospective study was conducted at our referral institution for IBD surgery between January 2000 and December 2017. Patients who underwent an emergency operation due to perforation prior to a definitive diagnosis were excluded.

Results: A total of 42 (22 males) patients with Int BD were included. Their median age was 39 years (range 11–76) and the duration of disease was 4.3 years (0.1–16.1). Lesion location was ileocaecal in 26 (61.9%), ileum and colon in 10 (23.8%), and colon in 6 (14.3%) patients. Five (11.9%) were also complicated with oesophageal lesions. For medical treatment, 5-aminosalicylates were given to 31 (73.8%), corticosteroids to 30 (71.4%), anti-TNF α agents to 26 (61.9%), immunomodulators to 22 (52.4%), and colchicine was given to 20 (47.6%) patients. An intestinal resection was performed in 25 (59.5%) cases. The median time from initiation of medical treatment to surgery was 19.6 months (2.4–192.9 months). The cumulative operation rate after obtaining a definitive diagnosis was 19.1% at 1 year, 23.8% at 3 years, and 28.9% at 5 years. Postoperative complications were surgical site infection in 11 (26.2%) patients, including 2 with an intraabdominal abscess and 1 with a ruptured suture, and bowel obstruction was seen in 3 (7.1%). Intestinal lesion recurrence was confirmed in 13 patients, of whom 8 underwent a re-operation. The cumulative re-operation rate after the first surgery was 8.6% at 1 year, 23.0% at 3 years, and 31.5% at 5 years. Predictive factors for surgery shown by univariate analysis were corticosteroids administration (OR, 4.6; $p = 0.03$), colchicine administration (OR, 3.6; $p = 0.05$), higher CRP (OR, 1.2; $p = 0.01$), lower haemoglobin (OR, 0.8; $p = 0.16$), and non-administration of an anti-TNF α agent (OR, 0.2; $p = 0.04$), while non-administration of an anti-TNF α agent (OR, 0.1; 95% CI, 0.01–0.61; $p = 0.04$) was the only predictive factor for surgery in multi-variate analysis.

Conclusions: Surgery and a re-operation are sometimes needed during the clinical course of Int BD. Administration of an anti-TNF α agent with appropriate timing may be effective to avoid surgery.

P697

Pneumocystis jirovecii pneumonia in IBD patients treated with immunomodulator(s)

S. Vieujean^{*1}, A. Moens², K. Rothfuss³, E. Savarino⁴, S. Vavricka⁵, C. Reenaers¹, M. Ferrante², J.-F. Rahier⁶, ECCO CONFER Investigators

¹University Hospital of Liège, Department of Gastroenterology, Liège, Belgium, ²University Hospitals Leuven, Department of Gastroenterology and Hepatology, Leuven, Belgium, ³Robert-Bosch-Hospital, Department of Gastroenterology and Hepatology, Stuttgart, Germany, ⁴University of Padua, Department of Gastroenterology, Padua, Italy, ⁵University Hospital, Department of Gastroenterology and Hepatology, Zurich, Switzerland, ⁶CHU UCL Namur, Department of Gastroenterology and Hepatology, Yvoir, Belgium