Methods This is a prospective observational study of patients with opioid abuse (, who were diagnosed as having GI ulcers or strictures, between January 2016 and December 2018, at Dayanand Medical College and Hospital, Ludhiana, India. The diagnosis was made on the basis of radiology (Computed Tomography Enterography or Magnetic Resonance Enterography) and/or endoscopy (gastroduodenoscopy or ileocolonoscopy). The ulcer/stricture was attributed to opioids once other possible etiologies of GI stricture like non-steroidal anti-inflammatory drugs, Crohn's disease, infections, neoplasias, corrosive ingestion, ischaemia and peptic ulcers were excluded. Clinical parameters including presenting complaints, site of disease, haematological and biochemical parameters and treatment given were recorded.

Results During the study period, 18 patients (mean age 38.46 ± 14.86 years, 100% males) were diagnosed to have opioid-induced GI ulcers/strictures. Tramadol capsules (77.78%) followed by poppy husk (22.22%) were the most common forms of opioid consumption. Iron deficiency anaemia [$n=16$ (88.89%)], fatigue [$n=14$ (77.78%)], vomiting [$n=11$ (61.11%)], pain abdomen and loss of weight [$n=10$ (55.55%)] each were the most common presenting complaints. Five (27.78%) patients presented with GI bleed. There were two common sites of involvement, gastroduodenal ($n=11$, 61.11%) and jejuno-ileal ($n=7$, 38.88%). Four (22.22%) patients had ulcers whereas 14 (77.78%) patients had strictures on evaluation. Ten (55.55%) patients underwent balloon dilatation of stricture, six of whom (60%) failed to respond and needed surgical intervention. Two patients (11.11%) were taken up for emergency surgery (without attempting balloon dilatation) as both had deep Forrest Ia duodenal ulcers, refractory to endoscopic management. Results are summarized in table 1 (table 1).

Conclusions Opioid abusers can have gastro-intestinal ulcers and strictures and are difficult to treat with medical/endoscopic therapy.

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PATTERN OF RESPONSE TO SERIAL FECAL MICROBIOTA TRANSPLANTATION VIA COLONOSCOPIC ROUTE IN PATIENTS WITH ULCERATIVE COLITIS

Vandana Midha*, Ramit Mahajan, Arshdeep Singh, Varun Mehta, Yogesh Gupta, Kirandeep Kaur, Vikram Narang, Ajit Sood. *Dayanand Medical College and Hospital, Ludhiana, India*

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Background Fecal microbiota transplantation (FMT) targeting gut microbiome dysbiosis is an emerging therapy for ulcerative colitis (UC) and has been found to be efficacious in multiple randomized trials. However, there is no uniformity in protocols with respect to the route of administration, the frequency of intervention and amount of fecal slurry delivered. We intend to study the pattern of response to serial fecal microbiota transplantation via the colonoscopic route in patients with ulcerative colitis.

Methods A retrospective analysis of patients with active UC (Mayo clinic score ≥ 4), who received multi-session FMT (at weeks 0, 2, 6, 10, 14, 18 and 22) via a colonoscopic route, in addition to standard of care, between June 2015 and December 2018 was done. The proportion of patients maintaining steroid-free clinical remission (Mayo score ≤ 2 , all sub

scores ≤ 1) and achieving endoscopic remission (endoscopic Mayo score 0) were calculated for each FMT session.

Results One hundred twenty-four patients [mean age 34.84 ± 11.91 years, 66.93% males ($n=83$), mean mayo clinic score 8.13 ± 2.65] who consented for FMT were analysed retrospectively. Proportion of patients maintaining steroid-free clinical remission (Mayo score ≤ 2 , all sub scores ≤ 1) as well as achieving endoscopic remission (endoscopic Mayo score 0) increased with serial sessions of FMT (16.6% after 1st session vs 65.55% after 7th session for clinical remission and 3.62% after 1st session vs 37.93% after 7th session for endoscopic remission). (figure 1)

Abstract IDDF2019-ABS-0310 Figure 1

Conclusions With serial colonoscopic FMTs for active ulcerative colitis, the response rates, determined by the maintenance of steroid-free clinical remission and endoscopic remission, gradually increase. Repeated interventions over longer periods may result in a persistent change in gut microbiota composition that is otherwise inherently resilient, resulting in improvement in disease activity indices.

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EFFICACY AND COST-EFFECTIVENESS OF PREMEDICATION WITH N-ACETYLCYSTEINE DURING UPPER GASTROINTESTINAL ENDOSCOPY EXAMINATION: A SINGLE CENTER, PROSPECTIVE, SINGLE BLINDED, RANDOMIZED CONTROLLED TRIAL

Lingye Zhang*, Jingling Cheng, Ming Ji, Shanshan Wu, Huihong Zhai, Shutian Zhang. *Department of Gastroenterology, Beijing Friendship Hospital, Capital Medical University, China*

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Background Detecting gastric cancer in the early stage is the key factor in reducing cancer mortality. Endoscopists can now detect early cancer with the aid of advanced imaging in endoscopy. A major technical obstacle in achieving a good quality of endoscopic examination of the gastric mucosa is the presence of foam and mucus over the mucosal surface. Pro-nase has become a common anti-mucus agent used for improving visibility during upper gastrointestinal endoscopy examination, especially in eastern Asia. While N-acetylcysteine (NAC) can serve as an alternative mucolytic agent more economically. The aim of this study is to investigate the efficacy and cost-benefit of premedication with NAC during esophago-gastroduodenoscopy (EGD).

Methods We enrolled 1,200 patients and randomly allocated them into 4 groups with different types of premedication. Premedication used in regular group (RG) was 10 mL lidocaine hydrochloride mucilage (LHM) and in pronase+simethicone group (P+S) was 60 mL pronase/simethicone solution plus 10 mL LHM. Meanwhile, 60 mL NAC600 mg/simethicone solution plus 10 mL LHM and 60 mL NAC1200 mg/simethicone solution plus 10 mL LHM were given to the patients in NAC600+simethicone group (NAC600+S) and NAC1200+simethicone group (NAC1200+S), respectively. We recorded visibility scores, times of cleaning, time taken for examination, diminutive lesions and pathological diagnosis. Cost-benefit of premedication was analyzed.

Results The visibility of NAC600+S and NAC1200+S are significantly better than RG, although P+S exhibited the lowest total visibility score and shortest procedure duration (figure 1). Times of cleaning was remarkably decreased in NAC600+S and NAC1200+S compared to RG, but was inferior to P+S. There is no significant difference in detection rate of diminutive lesions and pathological diagnosis. Cost-benefit analysis has shown that net medical yield of NAC/simethicone is higher than that of pronase/simethicone.

Abstract IDDF2019-ABS-0311 Figure 1 Total visibility score of each group

Conclusions NAC can not only facilitate the visibility during EGD, but be more cost-beneficial. It should be recommended as a good alternative premedication to pronase during EGD, especially in developing countries and regions.

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CLINICAL FACTORS AFFECTING RESPONSE TO FECAL MICROBIOTA TRANSPLANTATION IN PATIENTS WITH ACTIVE ULCERATIVE COLITIS

Vandana Midha*, Ramit Mahajan, Arshdeep Singh, Varun Mehta, Yogesh Gupta. Dayanand Medical College and Hospital, Ludhiana, India

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Background Fecal microbiota transplantation (FMT) has emerged as a novel therapy for ulcerative colitis (UC). However patient selection in published trials is not uniform. Also, not all patients receiving FMT show a clinical response. Hence ideal patient population to be considered for FMT is not known. We study the factors affecting response to fecal microbiota transplantation in patients with active ulcerative colitis.

Methods This was a single-centre analysis of data from patients with active UC treated with FMT from September 2015 to December 2018 at the Dayanand Medical College, a tertiary care centre in India. Fecal samples from two unrelated donors [A and B, alternatively for each session (A.B.A.B.A.B.A)], were administered through colonoscopy at weeks 0, 2, 6, 10, 14, 18, and 22. Disease activity including endoscopic severity (using Mayo score) and response to therapy was assessed and recorded at each visit. Clinical response was defined as a decrease from baseline in mayo clinic score by $\geq 30\%$ and ≥ 3 points with a decrease in rectal bleeding subscore of ≥ 1 or rectal bleeding subscore of 0 or 1. Both disease characteristics and patient characteristics affecting response to FMT were then retrospectively analysed.

Results One hundred twenty-four patients [mean age 34.84 ± 11.91 years, 66.93% males ($n=83$), mean mayo clinic score 8.13 ± 2.65 , mean disease duration 5.04 ± 4.82 years] who received FMT were analysed retrospectively. The characteristics favouring response to FMT were E2 disease ($p=0.01$) and severe disease (greater total mayo clinic score, endoscopic mayo clinic score, ESR and CRP; $p=0.001$, 0.003 , 0.002 , 0.001 respectively). Low serum albumin was a predictor of non-response ($p=0.003$). Patients with no pseudopolyps ($p=0.06$) and previous exposure to biologics ($p=0.08$) and thiopurines ($p=0.06$) showed a trend towards response with FMT, however, failed to reach statistical significance. Concomitant use of corticosteroids did not affect the response rates with FMT ($p>0.05$).

Conclusions Left-sided UC, severe disease and high serum inflammatory markers (ESR and CRP) significantly predict response to FMT. Absence of pseudopolyps and previous exposure to biologics and thiopurines also favoured response.

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THE DIAGNOSTIC ACCURACY OF PAPANICOLAU STAINING IN BRUSH BIOPSY AS AN ALTERNATIVE TO TISSUE BIOPSY IN PATIENTS UNDERGOING COLONOSCOPY FOR NON-OBSTRUCTING COLONIC TUMORS

Clint Becaldo*, Arlene Kuan. Vicente Sotto Memorial Medical Center, Cebu City, Philippines

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Background The study was conducted to determine the diagnostic accuracy of papanicolau stain in detecting malignancy from brush biopsy specimens in patients undergoing colonoscopy.

Methods A prospective, open-label 19-month study, covering February 2016- September 2017 of patients aged 19 years and above. Demographics and informed consent of all patients undergoing colonoscopy were taken. On colonoscopy, brush biopsies around the four sides of tumors were sampled after the tissue biopsy then smeared to slides, fixed with 95% ethyl alcohol and stained with Papanicolau method and read by 2 independent pathologists.