

**Introduction** Adalimumab (ADA) is effective for the induction and maintenance of remission in Crohn's disease (CD) patients. Although the approved maintenance regimen is 40 mg subcutaneously every 14 days, some patients require dose-escalation (DE).

**Methods** Aim of the study was to describe a large, well-characterised cohort of ADA treated CD patients in a tertiary referral centre and to identify factors predicting the need for DE. A prospectively maintained database of CD patients treated with ADA at the Guy's and St Thomas' IBD Center between 2007–2012 was interrogated. Clinical and phenotypic details and exposure to therapy were analysed. Survival and regression analyses were performed.

**Results** 112 CD (50% Male) patients commenced ADA. Three patients had coexisting Oro-Facial Granulomatosis. Mean age at diagnosis was 22 (SD; 9) years. Disease location was ileo-colonic (68.8%) in the majority. Upper gastrointestinal (UGI) involvement was found in 17.9%, peri-anal disease in 29.5% and extra-intestinal manifestations in 14.3%.

Median duration of disease prior to ADA initiation was 11 years (IQR; 5–18). Previous infliximab (IFX), ADA and exposure to both were found in 59, 3 and 7 patients respectively. Of the 66 patients exposed to IFX 29 (43.9%) had primary or secondary loss of response. A total of 82 (71.3%) were on concomitant immunomodulators ((CIM) - azathioprine, mercaptopurine, thioguanine or methotrexate) at the time of initiation of ADA.

103 (89.3) patients responded to ADA induction. 4 patients were primary non-responders, 5 withdrew due to adverse effects. All 4 primary non-responders and 3/5 who withdrew were previously exposed to IFX.

DE was required in 40 (38.8%) of the responders during the follow-up period at a median 26 months (95% confidence interval (CI); 19.6–32.4). Cumulative probability of requiring DE at 24 months was 52% (CI: 42–62). CIM at initiation of ADA (Odds ratio (OR): 0.21, CI: 0.09–0.47,  $p < 0.0001$ ), previous IFX exposure (OR: 4.27, CI: 1.73–10.55,  $p = 0.02$ ) and UGI involvement (OR: 3.43, CI: 1.02–11.42,  $p = 0.046$ ) were independently associated with need for DE in multivariate analysis. CIM at commencement of ADA was associated with increased time to DE (Hazard ratio: 0.34, CI: 0.18–0.64,  $p = 0.001$ ). 24/38 (63.25%) patients responded to DE, 2 patients had incomplete follow-up data.

**Conclusion** 38.8% of CD patients commencing ADA in this well defined cohort required DE due to loss of response, of which 63% were recaptured. CIM at initiation predicted a more durable response to standard dosing. UGI involvement and previous exposure to IFX were associated with increased risk of requiring DE.

**Disclosure of Interest** None Declared.

## Nursing

### PTH-118 QUALITY OF BOWEL PREPARATION FOR COLONOSCOPY: CAN WE LEARN ANYTHING FROM PATIENTS' PERSPECTIVES?

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**Introduction** Good quality bowel preparation (prep) with oral laxative agents is vital for accurate and safe colonoscopy. Previous work has studied associations between specific patient characteristics and inadequate bowel prep<sup>1</sup>. We analysed patients' perspectives of bowel prep to see if information could be gleaned to advise future patients.

**Methods** The study comprised 100 patients having outpatient colonoscopy at St George's Hospital in August to September 2012. In advance of the procedure, patients received two sachets of Citrafleet (to be taken 6 hours apart) and a booklet on colonoscopy & bowel prep by post. On arrival patients were asked to complete a questionnaire, including information on usual bowel habit, fluid intake,

perceived efficacy of the prep and whether the first or second sachet of prep worked better. Patient demographics and medical history were collected by nursing staff at admission clerking. The Endoscopist assessed the quality of bowel prep at colonoscopy using a standard four point score (0 = good, 1 = satisfactory, 2 = poor, 3 = very poor).

**Results** Complete data were collected on 89 patients (age range 21–100; mean age 64): One procedure was abandoned due to failed intubation; in 10 cases the endoscopist did not comment on quality of prep. Endoscopists reported 23 cases where preparation was sub-optimal, in contrast to only 5 patients (fifty seven patients felt the laxative worked very well and 38 quite well). There was a tendency towards those who thought the prep worked very well having better prep at colonoscopy, but this did not reach statistical significance ( $p = 0.24$ ). Patients with depression had poorer preparation at colonoscopy ( $p < 0.01$ ).

Fifty seven patients felt their bowels opened most after the first sachet, 43 after the second. Those who thought the second sachet was more effective than the first had poorer bowel prep at colonoscopy ( $p = 0.03$ ). Patients who reported their usual bowel habit as hard, and those with diabetes, had a tendency towards having their bowels open most after the second sachet, but neither relationship was statistically significant ( $p = 0.15$  &  $0.18$  respectively).

No correlations were found between patient gender, age or drinking habits and perceived quality of prep or efficacy of each sachet.

**Conclusion** Our results show that patients reporting more effective results after the second sachet of laxative have objectively poorer preparation at colonoscopy. We suggest that this information could be used to advise such patients that an increased fluid intake may be necessary before and after the second dose of laxative to optimise preparation. A larger study may help to identify further correlates with which we can advise our patients.

**Disclosure of Interest** None Declared.

## REFERENCE

1. Ness RM, Manam R, Hoen H, Chalasani N. Predictors of inadequate bowel preparation for colonoscopy. *Am J Gastroenterol*. 2001 Jun; 96(6):1797–802.

### PTH-119 NURSES AND ENDOSCOPISTS ARE EQUALLY GOOD AT GAUGING PATIENT DISTRESS DURING ENDOSCOPY

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**Introduction** Endoscopic procedures have the potential to be uncomfortable and distressing. Previous studies have suggested nurses are better than endoscopists at gauging patient's pain during endoscopy, possibly reflecting the endoscopists focus on the procedure as opposed to the nurse whose focus remains on the patient. Currently, there is a paucity of work evaluating distress another important marker of endoscopic tolerability. This study evaluates endoscopists' and nurses' ability to gauge patient's distress during gastrointestinal endoscopic procedures.

**Methods** Consecutive patients attending for clinically indicated gastrointestinal endoscopy were prospectively recruited from a tertiary referral centre between September 2011 and June 2012. Following informed consent being obtained patients were asked to record distress post endoscopy using a validated numeric rating scale (NRS), with scores recorded between 0 (no distress) and 10 (worst distress imaginable). Endoscopists undertaking the procedure and their assisting nurses were then asked to give their estimates of patient's distress using the same NRS, with recordings undertaken separately so as not to influence potential outcomes. Data was analysed using SPSS version 20, with a correlation coefficient used to determine levels of agreement in distress scores.

**Results** 929 patients were recruited to the study (425 (46%) male, median age of 58 years, range 17–92 years). Of these, 306 (33%) underwent an OGD, 304 (33%) had a colonoscopy, 100 (11%) had a flexible sigmoidoscopy, 86 (9%) had an endoscopic ultrasound, 100 (11%) had an ERCP and 33 (4%) had a double balloon enteroscopy. 319 (34%) of the patients recruited had NRS scores > 5 for distress, with multivariate analysis identifying pre-procedure anxiety ( $p < 0.0001$ ) as the only variable predictive of patient distress. Both endoscopist and nurse assessments of patient's distress moderately correlated with the patient's actual reported distress (Table 1), with significant correlation identified between each other.

**Abstract PTH-119 Table 1** Table 1: Correlations between distress scores

	Correlation coefficient	Significance
Endoscopist - patient correlation	0.424	< 0.001
Nurse - patient correlation	0.405	< 0.001
Endoscopist - nurse correlation	0.651	< 0.001

**Conclusion** This study demonstrates that estimates of patient's distress during endoscopy are comparable between nurses and endoscopists. Whilst this finding is reassuring, procedural pain remains an important outcome measure better identified by nursing staff. We advocate that increased importance should be given to nursing assessments during endoscopic examinations.

**Disclosure of Interest** None Declared.

#### PTH-120 NURSING CHALLENGES OF IMPLEMENTING THE THREE SESSION DAY

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**Introduction Introduction:** Three session working day in endoscopy was implemented at the Royal Liverpool hospital (RLH) in October 2009: in order to increase capacity as there was no room for estate expansion. The main drivers for this were increased projected activity from Bowel Cancer Screening and the increased waiting times.

**Methods Aim** To discuss the nursing challenges when implementing three session days.

**Results Initial steps:** The three session day provides 18 extra lists per week. The business case provided a comprehensive breakdown of what would be achieved by the three session day, why it was necessary, what this would mean for the patients and what it would mean financially for the trust.

**Workforce Challenges** As nursing establishment increased, 10 WTE nursing staff/HCA, including one band seven Deputy Manager/Trainer. It is important that new staff are flexible. Workforce redesign, skill mix reviews, and altered contracts required careful negotiation and planning. Changing nursing rotas was a challenge as the new template did not marry well with traditional Monday – Friday 9–5pm nursing rotas. A creative and flexible approach to shift patterns was necessary, this allows maximum flexibility in rostering shifts but staff benefit from more time away from the department. Each staff member should be individually considered for each type of flexible working plan. It is important to robustly manage staff absence.

**Training Challenges** A culture developed of staff only feeling confident to do certain procedures, thus limiting the skill mix across the department. It was realised that so many new starters and an expanded workforce required further investment in training. It is essential to have a senior nurse to focus on training. Since then a full training programme has been implemented providing clear guidance

and structure to all staff. Support is also provided in weekly training sessions and cascade training.

**Leadership** Steering a team through any organisational change required strong medical, managerial and nursing leadership, with key skills of problem solving, organisation, negotiation, and the ability to communicate the right messages to the team. Communication strategies include weekly activity meetings with the managers, senior nurses, admin manager and endoscopy leads. Monthly staff meetings, quarterly user group meetings, Glitch board, communication board and daily team brief were introduced to facilitate feedback and communication.

**Conclusions** The three session day benefitted the department greatly by increasing much needed capacity when there was no room for expansion. It has been challenging and has only been successful through effective communication, a team approach and a commitment to achieving a common goal.

**Disclosure of Interest** None Declared.

#### PTH-121 PRACTICALITIES OF IMPLEMENTING A THREE SESSION DAY IN ENDOSCOPY

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**Introduction Introduction:** The three session day (8.30–20.30) was implemented at the Royal Liverpool Hospital (RLH) October 2009; this was necessary to guarantee an increased capacity in order to meet current and predicted service needs to accommodate the increase in activity lower GI investigation including the bowel cancer screening programme (BCSP) and rise in complex endoscopy

**Methods Aim** This is a reflective look on how this programme of change was implemented, what was achieved by its implementation and what lessons have been learned through the process.

**Results Prior to implementation** 4 rooms were undertaking 12,000 procedures per year with 40% inpatients 60% day-case activity. Waiting times were urgents 2–5 wks, routine 8–9 weeks, and surveillance 19 weeks

**Workforce planning and implementation** A collaborative approach between Trust (business case approval), Consultants, Nurse Managers, Administration and Human Resources and nursing unions was necessary to ensure full staff engagement as shift patterns had to be changed; job plans and contracts had to be altered. The increased workload required a long term investment of; 3X WTE Consultant Endoscopists (6 lists each), 1 X WTE Nurse Endoscopist (for training and 6 lists), 10X WTE Nurses/HCAs, 1X WTE Admin Manager, 2 X WTE Admin staff, 1XWTE Medical secretary. 1xWTE Nurse Educator, 1 WTE: Unit Manager

**List scheduling** 3 rooms are simultaneously run in the evening; these are segmented into 1 upper, 1 colonoscopy and 1 in-patient list. The day-case lists are shorter at 3 hours; so either 4 colons, 10 OGDs, 4 EUS or 6 in-patients are schedule per list. No complex endoscopy is listed. Patients listed have been younger with less comorbidity thus reflecting the working population. Particular advantage for colonoscopy as all bowel prep can be taken on the day of procedure.

**Results** Activity has increased to 16,000 procedures per annum with > 85% being day-case. This is due to a work-force flexibility and continual stream of communication through the admin manager to achieve list utilisation > 95%. With full booking, DNA in evening is < 5%. In our patient survey, 85% reported that they do not mind, are willing or very willing to come in the evening list. Waiting times; all urgent are within 2 weeks, routine within 6 weeks and Surveillance within 6 weeks.

**Conclusion** 3 session day can improve capacity and reduce waiting times but needs workforce planning and significant capital