Results Male patients were found to be less likely to develop pain during colonoscopy (odds ratio (OR) 0.43, 95% CI 0.35–0.53, p < 0.001). Those who had any malignancy in the past (OR 0.69, 95% CI 0.49–0.97, p = 0.02) and previous abdominal surgery (OR 0.63, 95% CI 0.47–0.84, p = 0.02) were less prone to having pain. Better bowel preparation improved the comfort of the procedure (OR 0.67, 95% CI 0.54–0.85, p = 0.001) however those who used Moviprep as bowel preparation were more likely to complain of pain (OR 1.83, 95% CI 1.34–2.49, p < 0.001). Higher dose of pethidine requirement was found to be associated with increase likelihood of reporting pain (OR 1.03, 95% CI 1.02–1.04, p < 0.001) but no association was found with the use of midazolam or buscopan. High performance endoscopists were found to cause less pain (OR 0.35, 95% CI 0.27–0.46, p = p < 0.001). The presence of diverticular disease showed a strong trend towards increasing probability of pain although it did not reach statistical significance (OR1.4, 95% CI 1.1–1.8, p = 0.07). Age and medical co-morbidities like rheumatological and neurological problems did not have any significant association.

Conclusion Likelihood of having abdominal pain during colonoscopy was found to be associated with being female, having poor bowel preparation and the procedure being performed by non-high performing endoscopists. Patients with past history of malignancy were also noted to have less tendency of having pain. The association of higher dose of pethidine and reported pain was likely to reflect the need of larger doses in such situation. Interestingly, history of previous abdominal surgery did not increase the likelihood of reporting pain and in fact had the opposite effect. The reason for why patients who had Moviprep as bowel preparation were more likely to complain of pain is unknown and this may need to be explored in future studies.

Disclosure of Interest None Declared.

PWE-070 THE DUODENAL-JEJUNAL BYPASS SLEEVE (ENDOBARRIER GASTROINTESTINAL LINER) FOR WEIGHT LOSS AND TREATMENT OF TYPE II DIABETES

doi:10.1136/gutjnl-2013-304907.359

[1]S Patel, [2]D Hakim, [3]J Mason, [4,*]N Hakim. *[1]South Thames Foundation School, London, UK; [2]Royal College of Surgeons in Ireland, Dublin, Ireland; [3]Gastroenterology, Trafford General Hospital, Manchester; [4]Imperial College Healthcare NHS Trust, London, UK*

Introduction The Duodenal–jejunal bypass sleeve (EndoBarrier Gastrointestinal Liner) is an endoscopically and fluoroscopically inserted implant designed to aid weight loss, treat type II diabetes mellitus and improve the cardiovascular risk profile of subjects. We aimed to trial this device in a cohort of patients to assess efficacy.

Methods We implanted the EndoBarrier bypass sleeve into 57 patients from January 2011 to December 2012. The EndoBarrier is an impermeable fluoropolymer sleeve that is reversibly fixated to the duodenal bulb and extends 80cm into the small bowel, usually terminating in the proximal jejunum. It is implanted in the GI tract endoscopically to create a barrier between food and the wall of the intestine and to delay the mixing of digestive enzymes with food. It alters the activation of hormonal signals that originate in the intestine, thus mimicking the effects of a Roux-en-Y gastric bypass procedure without surgery.

Results Results showed weight loss in all patients, as well as lowering of blood sugar levels. Only 1 early device removal (due migration) occurred. There were no major postoperative side effects.

Conclusion Results confirm that the device reduces blood sugar levels and triggers weight loss. This non-permanent device implanted and removed endoscopically, controlled blood sugar and weight loss without the trauma of surgery. Clinical trials to date, involving more than 300 patients, have demonstrated significant weight loss and diabetes improvement with the Endobarrier. However, since this is a new procedure and due to the lack of data, it is not yet known if weight loss and diabetes benefits will persist.

Disclosure of Interest None Declared.

PWE-071 SAFE SEDATION IN ENDOSCOPY: TIME FOR A NEW APPROACH?

doi:10.1136/gutjnl-2013-304907.360

[1,*]N Zakeri, [1]S Webster, [1]S Coda, [1]A Humphries, [1]A V Thillainayagam. *[1]Imperial College Healthcare NHS Trust, London, UK*

Introduction Despite increasing awareness of the potential hazards of endoscopic sedation, complications from sedation remain a major concern. Serious harm or death resulting from sedation overdose is now a Department of Health 'never event'[1]. Previous work by our group (2000–2005) demonstrated a steady sedation reversal incidence of 0.27%. Trust guidelines, in line with the current British Society of Gastroenterology safe sedation guidelines (2003)[2], were developed in 2005 (revised 2011). We present the results of a retrospective survey, evaluating whether the incidence and risk factors for sedation reversal events have changed.

Methods Our Trust is a large tertiary referral endoscopic centre across 3 sites. A retrospective analysis of all endoscopy (n = 73,989) was performed, including all sedated endoscopic procedures carried out between 2007 and 2012 (n = 52,553). Flumazenil or naloxone administration was used as a marker of sedation overdose requiring reversal. The results were compared to the previous single-site audit of 2000 to 2005 (n = 20,569). Reversal episodes were analysed for associations with total sedation dose given, patient ASA grade, age and procedure undertaken. Statistical analysis was carried out using chi squared test and the linear regression model (Origin®).

Results In total 149 sedation reversals were recorded, representing 0.28% of all sedated endoscopic procedures, with no significant difference from the reversal rate (0.27%) recorded between 2000 and 2005 (p = 0.79). Mean dose of midazolam used in reversal events was 3.1mg (range 0.5–14mg). Mean dose of opioid (as pethidine equivalent) was 47.9mg (range 12.5–150mg). Higher than recommended doses of midazolam (5mg) or opioid (pethidine equivalent 50mg) were administered in 7.4% and 6.7% of reversal events, respectively. Endoscopic Retrograde Cholangiopancreatography (ERCP) was most associated with sedation reversal (1%). Mean dose of midazolam varied by procedure type and was highest for ERCP (5.1±2.9mg) and lowest for flexible sigmoidoscopy (1.7±0.6mg; p < 0.01). Mean dose of pethidine or opioid equivalent was highest for ERCP (78±38.7mg) and lowest for colonoscopy (33±13.4mg; p < 0.01). Sedation reversal was positively associated with increasing patient ASA grade (p < 0.05).

Conclusion Despite the emergence of national and local guidelines, aimed at safe sedation practise, there was no decline in our Trust's rate of sedation reversals over the last 12 years. Furthermore, the findings suggest there is a subgroup of patients, and a subset of endoscopic procedures, which still carry a significant risk of oversedation requiring reversal. This may support the growing interest in alternative sedation strategies for prolonged therapeutic endoscopic procedures such as ERCP.

Disclosure of Interest None Declared.

REFERENCES

1. DOH 'Never Events' 2012/13
2. Safety and Sedation During Endoscopic Procedures, BSG 2003.

PWE-072 EFFECT OF CHROMOENDOSCOPY ON ADENOMA DETECTION IN THE COLON: A META-ANALYSIS

doi:10.1136/gutjnl-2013-304907.361

[1,2,*]N Mohammed, [1,2]V Subramanian. *[1]Gastroenterology, Leeds Teaching Hospitals NHS Trust; [2]Leeds Institute of Molecular Medicine, Leeds, UK*