Р3

### IMPROVING ERCP TISSUE ACQUISITION IN MALIGNANT STRICTURES WITH TRANSPAPILLARY ENDOBILIARY BIOPSIES

Wafaa Ahmed\*, Shwan Karim, Christopher Wadsworth. Imperial College Healthcare NHS Trust, London, UK

10.1136/gutjnl-2020-bsgcampus.78

Introduction Endoscopic retrograde cholangiopancreatography (ERCP) is performed in patients with panctreaticobiliary strictures to allow pathological diagnosis of malignancy and although brush cytology has been shown to have high specificity its sensitivity is low. Endoscopic transpapillary biopsies are obtained alongside brush cytology in our centre. We sought to assess whether this technique increased diagnostic accuracy.

Methods Endoscopy reporting system was retrospectively interrogated for all patient undergoing ERCP where cytology and endobiliary biopsies were obtained from January 2015 to December 2019. Patients with no confirmed diagnosis were excluded. Patient demographics, comorbidities, cytology and histology were recorded. Endobiliary biopsies were taken by advancing paediatric forceps into the bile duct after sphincter-otomy under fluoroscopic guidance.

Results A total of 105 ERCPS (Male=68, 64.8%, Female=37, 35.2%) were done where both endobiliary cytology and biopsies were taken. Median age was 67.5 years old (range 28.4–90.7). 81 (75.7%) had at least one co-morbidity. Median number of biopsies taken was 4 (range 1–10) of biopsies taken, 8 did not have no of biopsy's recorded. 67 cases had a malignant stricture confirmed after MDM discussion.

The sensitivity of cytology alone was 34.3% (23.2% to 46.9%) compared to 56.7% (44.0% to 68.8%) for histology alone. Combined, their sensitivity was greater than for either alone 64.2% (51.5% to 75.5%). For patients with confirmed cholangiocarcinoma (N=23), cytology alone had a sensitivity of 43.5% (23.2% to 65.5%) as compared to 73.9% (51.6% to 89.8%) for histology. The combined sensitivity in cholangiocarcinoma was also greater than for either alone 82.6% (61.2% to 95.1%). There were no false positives (Specificity=100%).

There were 4 incidence of post ERCP pancreatitis, none of which met severe criteria and 1 case of a local retroperitoneal perforation at D2/D3 which settled spontaneously.

Conclusions The use of endobiliary biopsies alongside brush cytology in cases of malignant strictures increases sensitivity, particularly in cases of cholangiocarcinoma. Endobiliary biopsy in itself did not increase risk of complication.

P4

#### CLINICAL AND ENDOSCOPIC CHARACTERISTICS ASSOCIATED WITH INTERVAL UPPER GASTROINTESTINAL CANCERS: A SYSTEMATIC REVIEW AND META-ANALYSIS

<sup>1,2</sup>Leo Alexandre\*, <sup>1</sup>Theo Tsilegeridis-Legeris, <sup>1,2</sup>Stephen Lam. <sup>1</sup>Norwich Medical School, University of East Anglia, Norwich, UK; <sup>2</sup>Norfolk and Norwich University Hospital, Norwich, UK

10.1136/gutjnl-2020-bsgcampus.79

Introduction The prognosis of upper gastrointestinal (UGI) cancers generally is very poor and attributed to advanced stage at diagnosis. Approximately one in every twelve patients with an UGI cancer in the UK receives a gastroscopy

within three years prior to diagnosis (an interval cancer). This systematic review aimed to (1) determine the clinical and endoscopic characteristics associated with interval UGI cancers (compared with incident cancers), and (2) quantify the proportion of individual endoscopic findings in endoscopies within three years preceding diagnosis of interval cancer.

Methods We searched MEDLINE and Embase from Jan 1, 2000, to Feb 7, 2020, for studies comparing the characteristics of interval and incident UGI cancers, and studies reporting the proportion of findings at the initial 'cancer-negative' endoscopy in those with interval cancer. We synthesised results using random effects meta-analysis. This review is registered on PROSPERO, CRD42019125780.

Results A total of 997 citations were screened and 13 studies were included in the meta-analysis, comprising 44315 UGI malignancies, of which 5067 (11.4%) were interval cancers. In studies reporting the interval between the first 'cancer-negative' endoscopy and diagnosis of cancer (within 3 years), the median interval was 18 months. There were no significant differences in age or gender between interval and incident UGI cancers. Patients with interval cancers were less likely to present with dysphagia (OR 0.38, 95% CI 0.17-0.88) or weight loss (OR 0.50, 95% CI 0.28-0.92). There were no differences in presentation with anaemia (OR 0.62, 95% CI 0.23-1.64), GI bleeding (OR 1.20, 95% CI 0.75-1.91), or vomiting (OR 0.69, 95% CI 0.36-1.30). Gastro-oesophageal reflux (OR 2.69, 95% CI 2.28-3.18) was associated with a higher odds of interval malignancy. Endoscopist experience was not associated with interval cancers (OR 1.16, 95% CI 0.79-1.69). Intestinal metaplasia (IM) was associated with interval gastric cancer (OR 4.85, 95% CI 1.86-12.69). For gastric cancer, the most common abnormalities in the first 'cancer-negative' endoscopy prior to diagnosis were IM (41%), gastritis (36%) and gastric atrophy (31%). For oesophageal cancer, the equivalent abnormalities were gastritis (40%), oesophagitis (33%), nodularity (18%), stricture (16%) and food bolus obstruction (10%).

Conclusions There is little difference in demographic characteristics between interval and incident UGI cancers, however there are distinctions in presenting symptoms and endoscopic findings. Abnormalities found at the initial endoscopy prior to diagnosis of interval cancers are common.

P5

# THE REAL WORLD EFFECTIVENESS OF NEW GENERATION SPATZ BALLOON ON WEIGHT LOSS IN SUPER-OBESE PATIENTS

<sup>1</sup>Mohammed Khan, <sup>1</sup>Adnan Al-Zanbagi, <sup>1</sup>Abdulaziz Tashkandi, <sup>2</sup>Ali Montashery, <sup>1</sup>Abdulwahab Neyazi, <sup>1</sup>Laeeque Ahmed, <sup>3</sup>Ghadeer Alhazmi\*, <sup>3</sup>Ghadeer Monshi, <sup>1</sup>Mohammed Kareem Shariff. <sup>1</sup>Digestive and Liver Center, King Abdullah Medical City, Makkah City, Saudi Arabia; <sup>2</sup>Specialized Surgical Department, King Abdullah Medical City, Makkah City, Saudi Arabia; <sup>3</sup>Collage of Medicine, Umm Al-Quraa University, Makkah City, Saudi Arabia

10.1136/gutjnl-2020-bsgcampus.80

Introduction Pre-operative weight loss of at least 10% of excess body weight has shown to improve both intra and post operative outcomes especially in super-obese patients. Spatz Adjustable Balloon System<sup>®</sup> (Spatz FGIA, Inc., NY, USA) (SAB3) is the only Intragastric balloon whose volume can be

Gut 2021;**70**(Suppl 1):A1–A262

outcome	3 Month ( n = 51 )	6 Month ( n = 60 )	12 Month ( n = 31 )	P value <sup>a</sup> (comparing baseline and 6 months)	P value <sup>b</sup> (comparing 6 and 12 months)
Mean absolute	12.86 ±	11.43 ±	35.16 ±	P= <0.001	P= 0.001
weight loss (kg)	11.58	16.44	34.99		
Mean%TBWL	6.81 ±	6.33 ±	18.90 ±	P= <0.001	P= <0.001
	5.59	8.09	18.64		
Mean%EWL	10.04 ±	9.42 ±	27.92 ±	P= <0.001	P= <0.001
	8.36	11.93	27.88		
% Patients with >10%TBWL	21.6%	33.3%	58.3%	_	_

adjusted and left in stomach for a period of 12 months. Its use in super obese patients has not been studied.

Aim to retrospectively evaluate the effectiveness of SAB3 in super-obese patients (BMI≥50 kg/m²) as bridge to definitive surgery and report the complications associated with it.

Methods Super obese patients who had SAB inserted and completed ≥6 months of follow up were included in the study. The absolute weight loss, mean percent excess weight loss (%EWL) and the% total body weight loss (%TBWL) at 3, 6 and 12 months was recorded from hospital electronic system.

Results A total of 60 patients with a mean (±SD) age, initial BMI and weight of 41 years (± 12), 68.59 kg/m² (± 9.57) and 183.45 kgs (± 32.81), respectively had SAB inserted. Data was available on 51, 60 and 31 patients at 3, 6 and 12 months. The mean%EWL at these time points was 10.04 (± 8.36), 10.45 (± 9.85) and 27.92 (27.88).% Patients with >10%TBWL at same time points was 21.6%, 35% and 58%, respectively (table 1 below). 21 (40.4%) patients went on to have a definitive bariatric surgery to date. Complications associated with SAB were abdominal pain in 16.7% (10), severe enough in 6 for unplanned SAB removal, gastroesophageal reflux 13.3% (8), intestinal obstruction 1.7% (1), migration 1.7% (1), deflation in 6.7% (4), nausea/vomiting 12% (7).

Conclusion SAB placement in our center was safe, tolerable and achieved the desired weight loss in majority of the superobese patients. The rate of SAB early removal was in keeping with real world literature.

P6

## SAME DAY BOWEL PREPARATION FOR COLONOSCOPY LEADS TO BETTER OUTCOMES; RESULTS OF A NATIONAL SURVEY

Thomas Archer\*, Ammar Al-Rifaie, Ahmad Reza Shirazi-Nejad, Mo Thoufeeq, Stuart Riley. Sheffield Teaching Hospitals, Sheffield, UK

10.1136/gutjnl-2020-bsgcampus.81

Introduction Adequate bowel preparation is an essential prerequisite to high quality colonoscopy. Previous studies suggest that split dose bowel preparation and timing the colonoscopy 4–6 hours after completion of the preparation results in optimal bowel cleansing. However, anecdotal evidence suggests that bowel preparation instructions do not consistently recommend split dosing; or optimise timing. The aim of this study was to survey the instructions given to guide bowel preparation and compare this to outcome measures.

Methods All NHS trusts in the UK were surveyed with a standard email requesting data between January 2018 and January 2019. Data requested included: type of prep, timing of prep, pre endoscopy diet, adequacy rates and adenoma detection.

Results Response rate was 79% (n=128). Seven were excluded due to insufficient data. Moviprep was the first line bowel preparation in 79%, 19% used magnesium sulfate/ picosulphate and 2% used Klean prep. Only 10 units advised patients to split prep so that they took a dose of bowel preparation on the same day (SD) as their morning procedures, whereas 111 units advised patients to take bowel prep the day before (DB). In the DB group, the median time in which the second dose of bowel preparation was advised to be consumed was 8 pm (range 2 pm-9 pm, 95% confidence interval  $\pm$  2.72 hours); 12.5 hours prior to the first morning procedure (assuming a first appointment of 830 am). In the SD group, the rate of inadequate bowel preparation was 5.1% (1885/37224), compared with 7% (25107/361409) (p<0.0001) in the DB group. 15 of the trusts in the DB group, also provided adequacy rates divided between morning and afternoon procedures. Within this subgroup, all afternoon procedures received a portion of bowel preparation on the day, whereas all the morning procedures were advised to consume their bowel preparation the day prior. Morning procedures had rate of inadequate bowel preparation of 7.6% (2523/33072), whereas afternoon appointments was 6.6% (1836/27635) (p<0.0001).

Conclusion Most endoscopy units do not appear to give instructions devised to optimise the timing of bowel preparation prior to colonoscopy. This results in an increased rate of reported inadequate bowel cleansing. Splitting the dose of bowel preparation and tailoring the timing of preparation to the proposed timing of colonoscopy has the potential to significantly reduce the risk of missed lesions and the need for a repeat colonoscopy. If optimisation were to lead to the reduction of inadequate colonoscopies seen in this dataset, it could be extrapolated that an estimated 14000 fewer colonoscopies would have poor bowel preparation, saving a potential £8.4 million/year if these no longer required a repeated procedure.

P7

#### DOES INDIVIDUALISED FEEDBACK IMPROVE COLONOSCOPY KEY PERFORMANCE INDICATORS?

Thomas Archer\*, Mo Thoufeeq. Sheffield Teaching Hospitals, Sheffield, UK

10.1136/gutjnl-2020-bsgcampus.82

Introduction Colonoscopy is the gold standard examination of the bowel. Detection and removal of polyps leads to a reduced risk of subsequent colorectal cancer. Higher adenoma detection rate has been associated with a reduced post colonoscopy colorectal cancer rate. The BSG recommends a minimum performance standard, the key performance indicators (KPIs), which each independent endoscopist should achieve, to ensure quality. Monitoring of each endoscopists' KPIs, and offering individual feedback to those falling below the standard, may lead to improvement. In this study we assessed the response in KPIs following such feedback.

A44 Gut 2021;**70**(Suppl 1):A1–A262