PWE-217 IS "PUSH" AN EFFECTIVE AND SAFE METHOD FOR RELIEF OF OESOPHAGEAL FOOD BOLUS OBSTRUCTION ON ENDOSCOPY?

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V Mahesh,* M Schoeman. *Department of Gastroenterology, Royal Adelaide Hospital, Adelaide, Australia*

Introduction Food bolus obstruction of the oesophagus is not an uncommon acute presentation, but data on safe and effective endoscopic management is limited. Although "push" technique with the endoscope is commonly employed, no data on its safety and efficacy compared to other modalities is available.

Aim To evaluate the safety and efficacy of various endoscopic modalities for relief of acute oesophageal food bolus obstruction.

Methods Retrospective study of prospectively collected data. All patients presenting to the department of Gastroenterology at Royal Adelaide hospital, a tertiary centre in South Australia from January 1996 to November 2011 were included in the study. Detailed data on endoscopy, histopathology and complications were collected.

Results In total 288 patients presented with acute oesophageal food bolus obstruction. 70% male patients (202M:86 F); average age of 58.2 yrs±1.7 yrs at presentation. 150 (52%) patients had procedure with anaesthetic assist (± tracheal intubation), 135 (47%) with intravenous sedation (midazolam and fentanyl) and 3 (1%) with only topical anaesthesia. 44 (15%) patients had food bolus in the proximal, 59 (21%) in the mid and 146 (51%) in the distal oesophagus. In 39 (14%) food bolus had spontaneously cleared the oesophagus at endoscopy. The contributing aetiology for food bolus obstruction is described in Abstract PWE-217 table 1. Incomplete data on the type of food was available, but majority were documented to be meat bolus. Push technique was solely and successfully used in 167 (67%) compared to combination of techniques after failed "push" in 53 (21.2%) patients {forceps ± snare ± overtube ± basket} ($p<0.01$). Remnant 24 (9.6%) patients had one of the following: overtube/hood 5 (2%), forceps 8 (3.2%), snare 2 (1%), basket 5 (2%), suction 1 (0.4%) and wire guided dilatation 3 (1.2%). In five (2%) patients endoscopy was unsuccessful, one removed via rigid oesophagoscopy, four others passed food bolus spontaneously. Additional therapies like bougie and balloon dilatation was done in 64 (24.7%) patients at the index endoscopy. No complication/s attributable to endoscopy/technique was documented.

Abstract PWE-217 Table 1

Causes	n=288	%
Normal	55	19
Web	5	2
Post Nissen's/surgical	9	3
Malignancy	21	7
Schatzki's ring	22	8
Benign stricture	30	10
Reflux related disease	55	19
Eosinophilc Oesophagitis	59	20
Others (including non-specific histology)	32	11

Conclusion This is the first study to clearly show the safety and efficacy of push technique in relief of oesophageal food bolus obstruction. Combination of manoeuvres is the next best option; tracheal intubation to protect airway must be considered. Limitations of the study include retrospective nature and incomplete data on the type of food bolus.

Competing interests None declared.

PWE-218 EXPERIENCE OF COLONIC STENTING IN A DISTRICT GENERAL HOSPITAL

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V Krishnan,* D Majumdar, D Dwarakanath. *Department of Gastroenterology, North Tees Hospital—NHS, Stockton on Tees, UK*

Introduction A significant number of colon cancer patients present with obstruction which is a surgical emergency. Emergency decompression surgery is associated with 25% mortality.[1] Self expandable metal stent (SEMS) provides a low-risk and successful option for managing them.[2] This study evaluates the outcome of the use of SEMS in malignant colonic obstruction (MCO) in a district general hospital (DGH).

Methods This retrospective study includes patients with MCO treated with SEMS over a period of 4 years. All the stentings were done by an experienced gastroenterologist. The Endoscopy reporting software (Unisoft), stent logbook, histology database and patient admitting system (PAS) were reviewed for data collection. Information regarding indication, site of the lesion, stent, procedure outcome, adverse events, discharge time and patient demographics were reviewed.

Results 52 patients had SEMS for MCO in the study period. 40 (76.9%) had elective and 12 (23.1%) had emergency stenting. The age range is from 48 to 93 years with a mean of 75.4 years. Majority of the patients were male (34, 65.4%). All patients with emergency stenting were admitted with total large bowel obstruction and 2 (16.6%) of them had post-stent curative surgery where as 6 (15%) of the elective group also had post-stent curative surgery. So in eight patients (15.4%) SEMS was used as bridge for surgery and in 44 (84.6%) it had a palliative role. Boston Scientific colonic stents (WallFlex) were used for all patients. The sites of the lesions were sigmoid 32 (61.5%), rectum 10 (19.3%), descending colon 7 (13.4%) and transverse colon 3 (5.8%). Extravasation of contrast occurred in 2 (3%), migration in 3 (5.8%) resulting in stent removal and blockage in 1 (1.9%) followed by Hartmann's procedure, giving a complication rate of 10.7%. The technical success rate is 100% (no procedural failure) and the clinical success rate is 89.3% (functional stent without complication). Average duration of post stenting hospital stay was 3.92 days.

Conclusion The key of our successful colonic stenting service (technical success—100%, clinical success—89.3% and successful bridging of 15.4% (n=8) to curative surgery) is the result of careful patient selection and delivery of the service by a single experienced operator. There was no procedure related mortality compared to emergency surgery of 25%. We feel all DGH with acute surgical intake should be equipped to provide this safe and useful service.

Competing interests None declared.

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PWE-219 FIRST REPORTED EXPERIENCE OF COLON CAPSULE ENDOSCOPY (CCE) IN ROUTINE CLINICAL PRACTICE

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V Sathyanarayana,* K Drew, S Hardcastle, A J Lobo, D Majumdar, R Sidhu, M E McAlindon. *Department of Gastroenterology, Sheffield Teaching Hospitals NHS Trust, Sheffield, UK*

Introduction The advantages of colon capsule endoscopy (CCE) over other imaging modalities include the absence of intubation, sedation

or irradiation. Recent multicentre trials suggest a sensitivity of approaching 90% in detecting significant polyps[1 2] but there are no data regarding use in routine clinical practice.

Methods Alternative modalities of colonic investigation were discussed with all patients requiring investigation. Data were collected prospectively on those undergoing colon capsule endoscopy following a standard bowel preparation. Small bowel patency was confirmed in patients with Crohn's disease using the Agile patency system.

Results 86 patients (67F; median age 42 (range 18–95)) underwent CCE (CC1, n=34; CC2, n=52). 81.4% had refused (n=43) or had had incomplete (n=27) colonoscopy. Indications: symptoms without alarm features (n=31), symptoms with alarm features (weight loss, bleeding, condition associated with malignancy; n=14), Crohn's disease (n=17), symptoms with abnormal blood test results; n=15), anaemia (n=6), miscellaneous (n=3). CCE was complete in 79.5% (n=66), incomplete in 19.8% (n=17), 3.5% failed (one patient did not swallow the capsule; two provided no images). Median (range) time in the small and large bowel were 63.5 (0–424) and 121 (0–1020) min respectively and bowel cleanliness score 2 (1–4: excellent-poor). Findings were normal (31.4%), inflammatory bowel disease (IBD 25.6%: Crohn's disease, n=13; ulcerative proctitis, n=1; NSAID colopathy, n=1; inflammation of uncertain significance, n=7), polyps (22.1%), diverticulosis (12.8%), angioectasia (5.8%), miscellaneous (3.5%), no images (3.5%). These were considered relevant to the indications in 25.6% (n=22, 15 of which were IBD). Outcomes included discharge (47.7%) and management change based on the findings (37.2%, including commencing (16.3%) or cessation (2.3%) of IBD therapy, further investigation (14.0%), advice regarding polyp surveillance (3.5%) and other treatment (2.3%). Half of the 20 patients with incomplete or failed studies were offered further investigations, six studies were considered sufficient to exclude organic disease, three showed active Crohn's disease and one patient was too ill for further investigation. There were no complications.

Conclusion CCE is an alternative for patients who refuse or have incomplete colonoscopy and which provides both small and large bowel visualisation. Although one in five studies were incomplete, sufficient information was provided to enable discharge in almost half the patients with functional bowel disorders and the identification of IBD in one quarter.

Competing interests None declared.

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PWE-220 HOW MANY BIOPSIES AT COLONOSCOPY ARE REQUIRED TO CONFIRM THE DIAGNOSIS HISTOLOGICALLY IN SUSPECTED COLORECTAL CANCER?

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V Sehgal,* B Krishnan, K Besherdas. *Department of Gastroenterology, Chase Farm Hospital, London, UK*

Introduction Colorectal cancer (CRC) is the third most commonly diagnosed cancer worldwide. The prognosis depends to a large extent on the stage of disease at the time of diagnosis such that the early investigation of relevant signs and symptoms is encouraged. At present the gold-standard method for the investigation of CRC is endoscopy as it permits direct visualisation and biopsy of the lesion in question. There is little evidence on the number of biopsies needed to be obtained if a CRC is suspected macroscopically at the time of endoscopy but there is a suggestion that a minimum of six biopsies should be taken to increase the yield of an early positive diagnosis.[1] Patients in whom the endoscopy biopsy is non-diagnostic and cancer suspected, a repeat colonoscopy to obtain additional tissue sample is often recommended. The aims of this study were to assess whether the number of biopsies taken of suspected cancers at the time of endoscopy was proportional to the rates of positive diagnoses being made while reducing the need for a repeat endoscopic procedure to confirm or exclude cancer.

Methods A retrospective analysis of all patients with suspected CRC upon endoscopy at Chase Farm Hospital over a 1-year period (2009–2010) was performed. Data were obtained from endoscopy and histopathology reports. Statistical analysis was performed using the Student t test and Fisher's test using SPSS V.20.0 ($p<0.05$).

Results 80 patients (37 male), median age 71.5 years were investigated over the audit period. Histology revealed adenocarcinoma (ACA) 52 (65%), high-grade dysplasia (HGD) 20 (25%), normal 5 (6.3%) and other 3 (3.7%). The median number of biopsies taken of suspected cancers for the whole cohort was 6 (1–12) and 44 (55%) had six or more biopsies taken. 16 (20%) patients required at least one repeat endoscopic procedure for diagnostic purposes (initial histology was HGD in 10, 62.5%, of these patients) and histology upon repeat endoscopy demonstrated ACA in 14 (87.5%) of these patients. Patients requiring repeat endoscopy had significantly fewer biopsies (median 4.5) taken at the time of initial endoscopy compared to those who did not (median 5.5), t (76)=2.54, $p<0.05$ using the Student t test. Patients requiring a repeat endoscopic procedure were more likely to have had less than six biopsies taken initially (11, 68.7%) compared to patients who had six or more biopsies taken (5, 31.3%) although the difference was not significant ($p=0.05$).

Conclusion Patients who have fewer biopsies are more likely to require repeat endoscopy for histological confirmation with subsequent delays in diagnosis. We recommend obtaining a minimum of six endoscopic biopsies in patients with suspected macroscopic CRC to confirm the diagnosis histologically and prevent a repeat endoscopy.

Competing interests None declared.

PWE-221 ENDOSCOPIC ULTRASOUND GUIDED FINE NEEDLE ASPIRATION (EUS-FNA) IN SUSPECTED SARCOIDOSIS—A 4-YEAR EXPERIENCE FROM A SINGLE CENTRE

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[1]V S Hegade,* [2]D Saralaya, [1]S Jowett, [1]C Beckett. *[1]Digestive Disease Centre, Bradford Teaching Hospitals Foundation NHS Trust, Bradford, UK; [2]Department of Respiratory Medicine, Bradford Teaching Hospitals Foundation NHS Trust, Bradford, UK*

Introduction EUS-FNA allows access to the posterior mediastinum and tissue acquisition under real-time ultrasound guidance through the oesophageal wall. There is ample evidence for effectiveness of EUS-FNA in staging lung cancer but data on its utility in the diagnostic work up of sarcoidosis is limited. The aim of this study was to report our experience of mediastinal EUS-FNA as a whole and its diagnostic yield in sarcoidosis in particular.

Methods The study included all patients who underwent mediastinal EUS-FNA in our institution from January 2008 to December 2011. Data on patient demographics, mediastinal lesion characteristics and EUS-FNA details were collected from endoscopy reports. Cytology reports and microbiology culture results were analysed. Final clinical diagnoses made during the follow-up were obtained from medical records. We calculated sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of mediastinal EUS-FNA for individual diagnoses.