

Conclusion 10% of patients with confirmed VTE had an endoscopy in the preceding 3 months of the diagnosis compared to 3% in the control group ($p < 0.001$). Pts undergoing endoscopy have a 3.6-fold increased risk of VTE compared to controls. Larger studies may highlight whether the type of endoscopic procedure or diagnosis may alter this risk.

Abstract PWE-209 Table 1

Analysis	Group	N	Endoscopy, N (%)	OR (95% CI)	p Value
All subjects	Controls	445	14 (3.2%)	3.58 (1.86 to 7.46)	<0.001
	Cases	445	45 (10.1%)		

Competing interests None declared.

REFERENCE

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PWE-210 ENDOBRONCHIAL VIDEOSCOPE FOR TRANSESOPHAGEAL/TRANSGASTRIC EUS-FNA IN SPECIAL SITUATIONS: A NOVEL TOOL FOR THE GASTROINTESTINAL ENDOSONOGRAPHER

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S Chatterjee,* K Oppong. *HPB Unit, Freeman Hospital, Newcastle upon Tyne, UK*

Introduction Oesophageal strictures/narrowing pose a distinct challenge during linear pancreatico-biliary endoscopic ultrasound (EUS) examination as the linear echoendoscope has a relatively rigid tip, large diameter and is oblique viewing. Significant oesophageal narrowing may therefore preclude linear EUS guided fine needle aspiration (FNA). The ultrasonic endobronchial videoscope (EBUS) has a much thinner diameter but, is considerably shorter and does not have air insufflation. It may however be of use in scenarios when there is oesophageal narrowing.¹

Methods We report the retrospective assessment of our experience of using the EBUS scope to characterise and FNA pancreatic and mediastinal lesions that were unsuitable for EUS examination using the linear echoendoscope. Our unit performs in excess of 750 pancreaticobiliary EUS examination a year.

Results Patient 1: 76-year-old man presented with mass in body of pancreas. He had an oesophageal stricture which impeded passage of a linear echoendoscope (Pentax EG-3870UTK). The Pentax endobronchial videoscope EB-1970OUK (EBUS) was used, which passed the stricture easily. EUS demonstrated multiple hypoechoic lesions. Tissue elastography revealed a blue predominant pattern with elevated strain ratio suggesting malignancy. FNA confirmed metastatic renal cell carcinoma. Patient 2: 63-yr-old female presented with progressive dyspnoea, dysphagia and stridor. CT showed massive mediastinal lymphadenopathy compressing the airway (over 13 cm) and the oesophagus. The length of compression meant an airway stent was not feasible. EUS-FNA was requested to obtain tissue to assess suitability for chemo-radiotherapy. The linear echoendoscope would not pass. EBUS scope documented massive mediastinal lymphadenopathy. FNA confirmed high grade neuroendocrine/small cell carcinoma. Patient 3: A 72-year-old gentleman presented with inoperable pancreatic malignancy based on CT scan abdomen. EUS-FNA was requested prior to initiation of chemotherapy. The linear echoendoscope would not pass the narrowed gastro-oesophageal junction probably secondary to achalasia. The EBUS scope was negotiated. There was a 27 mm mass in the body of pancreas extending posteriorly and involving the portal vein confluence. FNA was successfully obtained.

Conclusion We report the successful usage of EBUS scope to examine abnormalities inaccessible to the standard linear echoendoscope.

This work stresses the need to adopt new technologies to enhance the available diagnostic strategies for our patients.

Competing interests None declared.

REFERENCE

- Buxbaum JL, Eloubeidi MA. Transgastric endoscopic ultrasound guided fine needle aspiration in patients with esophageal narrowing using the ultrasonic bronchovideoscope. *Dis Esophagus* 2011;**24**:458–61.

PWE-211 LONGITUDINAL SURVEILLANCE OF SUBMUCOSAL TUMOURS BY ENDOSCOPIC ULTRASOUND: A SINGLE OPERATOR EXPERIENCE

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- ^{1,2}T P Hong,* ²A U Muruganathan, ²N Maqboul, ²J French, ¹Q Arroyo, ^{1,2}R Y Chen. ¹Department of Gastroenterology, St Vincent's Hospital, Melbourne, Australia; ²Department of Gastroenterology, Western Hospital, Melbourne, Australia

Introduction Endoscopic ultrasound (EUS) provides increasingly improved assessment of submucosal tumours (SMT). The low yield of fine needle aspiration and the benign nature of the majority of lesions leave the optimal management for smaller, asymptomatic lesions unclear as further invasive procedures or surgery may be avoidable. Longitudinal studies characterising interval change of SMT are lacking and may provide information useful in optimising management. We report the experience of a single operator in the EUS surveillance of SMTs.

Methods Patient cases were reviewed at two tertiary referral hospitals and one private hospital for patients who had serial EUS of the same lesion. EUS was performed by a single operator (RYC). For patients who had more than two EUS studies, details of the first and last were examined. Site, maximal diameter and layer of involvement were recorded. Paired data were analysed using a paired t-test with tests for correlation.

Results 73 patients with SMT had at least two EUS procedures between February 2002 and October 2011. Lesions were found in the oesophagus (14), stomach (51) and duodenum (8) with involvement of the submucosa (40), deep submucosa/muscularis propria (4) and muscularis propria (29). The range between first and last EUS was 4–80 months. The lesions varied between 4 and 50 mm with a mean maximal diameter of 15.13 mm (95% CI 12.78 to 17.49) for the first EUS and 15.73 mm (95% CI 13.36 to 18.09) for the second EUS. Paired t-test analysis between the first and last measurements show that there was no significant difference ($p = 0.2321$), with good correlation and effective pairing ($r = 0.9128$, $p < 0.0001$).

Conclusion In our study of submucosal tumours smaller than 50 mm, we showed no significant change in size on surveillance EUS. Further longitudinal studies are needed to determine optimal surveillance regimen for SMTs.

Competing interests None declared.

PWE-212 ACHIEVING DEFINITIVE HAEMOSTASIS IN NON-VARICEAL UPPER GASTROINTESTINAL BLEEDING—A SINGLE UK TERTIARY CENTRE EXPERIENCE

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- ¹T Chapman,* ¹G Hadley, ²S Dixon, ¹A Bailey. ¹Translational Gastroenterology Unit, John Radcliffe Hospital, Oxford, UK; ²Department of Radiology, John Radcliffe Hospital, Oxford, UK

Introduction Despite advances in endoscopic therapy for non-variceal upper gastrointestinal bleeding (NV-UGIB), achieving definitive haemostasis remains a challenge.¹ Radiological intervention with embolisation is an alternative to surgery where endoscopic

therapy has failed, yet there is little outcome data. We describe our experience of outcome following endoscopic therapy where both radiological and surgical interventions are readily available.

Methods A retrospective observational study of all patients undergoing therapeutic endoscopy as primary treatment for NV-UGIB at the John Radcliffe Hospital, Oxford, was performed. All 180 patients eligible over a 2-year period (January 2009 to December 2010) were included. The main outcome measures were failure of primary endoscopy, defined as continuing bleeding or rebleeding requiring further intervention or causing death, and definitive haemostasis rate after all intervention (repeat endoscopy, radiological embolisation or surgery).

Results 180 patients underwent therapeutic endoscopy; median age 75 years, 114 male (63.3%). 128 (71.1%) had peptic ulcer disease. Haemostasis was achieved at endoscopy in 165 (91.7%). In four patients endoscopic therapy was not attempted due to inaccessibility of the lesion. There was failure of primary therapeutic endoscopy in 40 (22.2%), with continuing bleeding in 13 and rebleeding in 27. A second intervention was undertaken in 37; embolisation in 21, repeat endoscopy in 14 and surgery in 2. 13 required three or more interventions. Definitive haemostasis was achieved in 18/25 (72%) of patients undergoing embolisation and 8/8 (100%) of patients undergoing surgery. All cause mortality was 20% in the embolisation group, with one patient dying from ischaemic complications. There were no deaths in the surgical group. Overall, definitive haemostasis was achieved in 174 patients (96.7%) with all cause 30-day mortality 10% and bleeding-related mortality 3.3%. Failure of primary endoscopy was associated with an increased risk in all cause mortality (RR 2.80, CI 1.18 to 6.62, $p=0.02$).

Conclusion The failure rate of therapeutic endoscopy for NV-UGIB was comparable with the published literature. The combination of endoscopic, radiological and surgical therapy achieved definitive haemostasis in a high proportion (96.7%). When endoscopic therapy failed, interventional radiology was an effective salvage modality in the majority of cases, avoiding the need for surgery. Failure of primary endoscopic therapy was associated with all cause mortality.

Competing interests None declared.

REFERENCE

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PWE-213

COMPARISON OF COLONOSCOPY QUALITY INDICATORS BETWEEN SURGEONS, PHYSICIANS AND NURSE ENDOSCOPISTS IN THE NHS BOWEL CANCER SCREENING PROGRAMME: ANALYSIS OF THE NATIONAL DATABASE

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¹T J W Lee, *²C Nickerson, ³C J Rees, ²J Patnick, ⁴M D Rutter, on behalf of Northern Region Endoscopy Group. ¹Institute of Health and Society, Newcastle University, Newcastle upon Tyne, UK; ²NHS Cancer Screening Programmes, Sheffield, UK; ³South of Tyne Bowel Cancer Screening Centre, South Tyneside General Hospital, South Tyneside, UK; ⁴Tees Bowel Cancer Screening Programme, University Hospital of North Tees, Stockton on Tees, UK

Introduction Screening colonoscopists in the NHS Bowel Cancer Screening Programme (BCSP) are predominantly surgeons, physicians or nurse endoscopists. There are a small number from other backgrounds such as general practice. All are required to be screening-accredited, attain the same standards prior to commencing colonoscopy in the programme (including performance of at least 1000 colonoscopies) and undergo the same performance

audits. This study examines whether there are any differences in colonoscopy quality indicators (CQI) among colonoscopists from these different backgrounds.

Methods The following CQI were calculated for all colonoscopists in the BCSP based on all index screening colonoscopies performed between August 2006 and August 2009: adenoma detection rate (ADR), polyp detection rate (PDR), mean number of adenomas per patient (MAP), mean negative complete colonoscopy withdrawal time (nc-CWT), caecal intubation rate (CIR), rectal retroversion rate (RRR), polyp retrieval rate (PRR), percentage of patients with no, minimal or mild discomfort and percentage of procedures performed with no intravenous sedation. Colonoscopists were classified according to their background. As only one colonoscopist was from a general practice background, this group was not included from subsequent analyses. ANOVA was used to compare the mean values for each of the CQI for each speciality.

Results Of 148 colonoscopists, 114 were physicians, 24 were surgeons and 10 were nurse endoscopists. In the study period, 36 460 colonoscopies were performed. The mean ADR for surgeons, physicians and nurse endoscopists were 46.7%, 46.6% and 44.2% respectively. The mean CIR rates were 95.3%, 95.3% and 94.7% respectively. These values were not significantly different ($p=0.570$, $p=0.839$). Similarly, no significant differences were seen in comparison of any of the other CQI or performance indicators (PDR, MAP, nc-CWT, RRR, PRR or patient comfort). The proportion of procedures performed without sedation by surgeons, physicians and nurse endoscopists were 10.4%, 13.8% and 27.5% respectively ($p=0.002$).

Conclusion This study demonstrates that standards of colonoscopy as assessed by eight colonoscopy quality indicators and measures of performance are similar for surgeons, physicians and nurse endoscopists. The difference in percentage of procedures performed without sedation may reflect differing attitudes to sedation and warrants further investigation. These data support the accreditation process for screening colonoscopists by demonstrating that all accredited colonoscopists perform to a high standard irrespective of speciality.

Competing interests None declared.

PWE-214

ENDOSCOPIC MUCOSAL RESECTION FOR EARLY NEOPLASIA IN BARRETT'S EPITHELIUM IN PATIENTS ON ANTICOAGULATION USING WARFARIN: IS IT SAFE?

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¹U Selvarajah, *¹S Al-Mamari, ¹A A Bailey, ²B Sgromo, ²R Marshall, ²N Maynard, ¹B Braden. ¹Translational Gastroenterology Unit, Oxford University Hospitals Trust, Oxford, UK; ²Department of Surgery, Oxford University Hospitals Trust, Oxford, UK

Introduction Endoscopic mucosal resection (EMR) has become an established treatment modality in the management of patients with high grade dysplastic lesions and intramucosal cancer in Barrett oesophagus. The mucosal defect caused by the endoscopic resection usually takes several weeks to heal. There is no data whether this procedure is also safe for patients requiring anticoagulation. The aim of the study was to investigate the risk of acute and delayed bleeding in patients on anticoagulation undergoing EMR for treatment of early neoplasia in Barrett oesophagus. We compared the complication rate of EMR in patients taking warfarin as anticoagulants with that of a control group.

Methods Warfarin was stopped 5 days before the planned EMR and restarted on the evening of the procedure day. Patients with high risk conditions such as recent pulmonary thromboemboli received bridging with low molecular weight heparin. All EMRs were performed when the INR was <1.5.