Abstract PTU-7 Figure 1 ROC curve comparing pre-endoscopic scoring systems in predicting HRE

predict patients with high-risk features during endoscopy and therefore poorer prognosis.

Methods We conducted a retrospective analysis of patients presenting with emergency AUGIB at Barnet Hospital over 22 months, using electronic patient records and endoscopy database. HRE were defined as: Forrest 1A/1B/2A/2B ulcers, Grade 2/3 varices, malignant lesion, and need for endotherapy. Statistical analyses conducted include Chi-Square tests for associations, multi-variable analysis and ROC curve; a p-value of <0.05 was considered statistically significant.

Results 153 of 473 (32%) patients had HRE (66% male, median age 73 years). Significant presenting complaints included melaena in 62.9% ($p=0.001$), haematemesis in 31.7% ($p=0.001$), syncope in 20.5% ($p=0.012$) and exertional dyspnoea in 13.2% ($p=0.000$). A history of cirrhosis and prior malignancy were significantly associated with HRE ($X^2=5.516$, $p=0.019$ and $X^2=5.186$, $p=0.023$ respectively). Multi-regression analyses showed that variables predicting HRE include haematemesis (OR 2.80, CI 1.49-5.23), melaena (OR 2.59, CI 1.50-4.45), cirrhosis (OR 3.19, CI 1.26-8.06), and urea trend (admission urea/baseline) (OR 1.37 CI 1.08-1.73). Admission Hb <100g/L, absolute urea levels and use of anti-platelets or anticoagulation were not significantly associated with HRE. In combination, these biomarkers were superior at predicting HRE compared to pre-existing scoring systems (AUROC 0.765, $p=0.000$) (Figure 1).

Conclusions A novel scoring system incorporating haematemesis, melaena, presence of cirrhosis, and urea trend may demonstrate a superior ability to predict high-risk features during endoscopy which in-turn predicts poor prognosis in AUGIB. Our data suggests that urea trend may provide additional value compared to absolute urea levels. Interestingly both admission haemoglobin <100g/L and use of anti-platelets or anti-coagulation did not significantly increase the risk of high-risk features on endoscopy.

REFERENCE

1. Siau K, Hearnshaw S, Stanley AJ, Estcourt L, Rasheed A, Walden A, et al. British Society of Gastroenterology (BSG)-led multisociety consensus care bundle for the early clinical management of acute upper gastrointestinal bleeding. *Frontline Gastroenterology* 2020;**11**(4):311-23.

PTU-8 ENDOSCOPICALLY 'MISSED' UPPER GASTROINTESTINAL CANCERS IN A SINGLE NHS CENTRE OVER 5 YEARS, 2015-19

Dominic Crocombe*, Robert Kennedy, Prashant Kant. York Teaching Hospitals NHS Foundation Trust, York, UK

10.1136/gutjnl-2021-BSG.81

Introduction Missed upper gastrointestinal cancer (UGIC) is defined in cases that had not been diagnosed at a previous oesophago-gastroduodenoscopy (OGD) performed within 3 years before the diagnosis. We reviewed the rate of missed UGIC at York Teaching Hospitals NHS Foundation Trust between 2015-19 to evaluate the service and inform strategies for improvement.

Methods Electronic patient records of all cases referred to the UGIC service between 2015-19 were interrogated for: patient demographics; diagnosis, staging and histology; OGD in 3 years preceding diagnosis that did not lead to diagnosis of UGIC; dates, indications, findings, and grade of endoscopist at diagnostic and prior OGD. Extra-luminal UGICs and those picked up on routine Barrett's screening (unless interval symptoms led to expedited OGD) were excluded.

Results 537 patients were diagnosed with UGIC between 2015-19, with median age 72 years at diagnosis. Of these, 37 (7%) met the definition of a missed UGIC, with a median age of 73 years at diagnosis. Of these, 16 (43%) were oesophageal, 5 (14%) gastro-oesophageal junction, 13 (35%) gastric, and 3 (8%) duodenal. The mean time between previous OGD and diagnosis in missed UGIC was 16.8 months.

11 of the 16 (69%) missed oesophageal cancers were adenocarcinoma, of which only 2 were in patients with known Barrett's. Of the 13 missed gastric cancers, 12 (92%) were adenocarcinoma and 1 neuroendocrine tumour (NET). 8 (62%) of the missed gastric cancers were in the distal stomach, 3 (23%) mid-stomach, and 2 (15%) proximal stomach. Of the 3 duodenal cancers, 2 were adenocarcinoma and 1 was a NET.

In 25 of 37 (68%) cases, the endoscopist of the OGD at which the cancer was missed was a consultant, 4 (11%) GP endoscopist, 3 (8%) nurse endoscopist, 3 specialist trainee alone, 1 (3%) specialist trainee supervised by consultant.

Conclusions The overall rate of missed UGICs was 7%, which is comparable to rates at other centres around the world; one meta-analysis quotes a range of 5.7 to 13.1%.¹ Missed oesophageal cancers were not strongly associated with pre-existing Barrett's, which is reassuring in the context of current screening rates. 62% of missed gastric cancers were in the distal stomach, which suggests it might be prudent to focus on this anatomical region to improve detection of subtle lesions. Finally, there was no clear pattern regarding role (for example, doctor or nurse) or grade of endoscopist and missed UGI cancer rates.

REFERENCE

1. Pimenta-Melo et al. Missing rate for gastric cancer during upper gastrointestinal endoscopy: a systematic review and meta-analysis. *European Journal of Gastroenterology & Hepatology* 2016;**28**:1041-49.