DEFINING AND TREATING A POSITIVE CIRCUMFERENTIAL RESECTION MARGIN IN OESOPHAGEAL AND GASTRO-oesophageal JUNCTIONAL CANCER

doI:10.1136/gutjnl-2012-302514c.184

1 R O'Neil,* 1N Stephens, 1V Save, 1H Phillips, 1H M Kernel, 1A G Robertson, 1D J Driscoll, 1S. Paterson-Brown, 1General Surgery, Royal Infirmary of Edinburgh, Edinburgh, UK; 2Pathology, Royal Infirmary of Edinburgh, Edinburgh, UK; 3Oncology, Western General Hospital, Edinburgh, UK; 4General Surgery, Queen Margaret Hospital, Dunfermline, UK

Introduction A positive circumferential resection margin (CRM) has been implicated with poorer prognosis in oesophageal and gastro-oesophageal junctional (OGJ) cancer. The Royal College of Pathologists (RCP) defines a margin as positive if tumour cells are present within 1 mm. In contrast, the College of American Pathologists (CAP) only defines a margin as positive if tumour cells are observed at the margin. The equivalence of the systems is not clear and the impact of adjuvant treatment has not been assessed.

Aims To compare the prognostic ability of the RCP and CAP systems in a cohort from a single UK centre and to determine if adjuvant radiotherapy offers a survival benefit for CRM positive patients.

Methods Patients with a “TP” adenocarcinoma or squamous cell carcinoma of the oesophagus or OGJ undergoing potentially curative resection between 1994 and 2010 were identified from a prospective database. Resection specimens were reviewed and the CRM was measured to ± 0.1 mm by a consultant pathologist. Univariate, multivariate and propensity score matching analyses (PSMA) were performed.

Results A total of 226 patients were included. Cox regression demonstrated patient sex (p=0.009), tumour differentiation (p=0.015), nodal (N) stage (p<0.001) and CRM group (p=0.045) were independently predictive of prognosis. Patients were grouped into CRM of 0 mm (CAP+ve, n=47), CRM >0 mm but <1 mm (RCPRCM, n=83) and CRM ≥1 mm (CRM-ve, n=96). Median survivals (95% CIs) were significantly different across groups (p=0.019) with CAP+ve = 18 months (13.0 to 23.0), RCPRCM = 29 months (18.6 to 37.5) and CRM-ve = 33 months (25.8 to 40.2). A trend for poorer survival was noted for the CAP+ve vs the RCPRCM group (p=0.075) although there was heterogeneity in N stage across groups. PSMA demonstrated no residual survival difference between CAP+ve and RCPRCM groups when other prognostic variables were controlled. Significant selection bias was observed for patients undergoing adjuvant radiotherapy. PSMA was applied to assess the treatment effect. Patients undergoing adjuvant radiotherapy (n=23) showed significantly improved survival when compared to controls (n=23) matched for sex, pre-operative treatment, N stage, histology and differentiation (p=0.04).

Conclusion The survival difference between CAP+ve and RCPRCM groups could be explained by existing prognostic variables. The CAP and RCP systems therefore appear equivalent in our cohort. In selected patients with a CRM <1 mm, adjuvant radiotherapy may be of benefit and a prospective randomised trial is indicated.

Competing interests None declared.

PTU-185 NOVEL TECHNIQUES FOR ASSESSING OESOPHAGO-PhARYNGEAL REFLUX IN PATIENTS WITH HOARSENESS AND SUSPECTED LARYNGOPHARYNGEAL REFLUX

doI:10.1136/gutjnl-2012-302514c.185

12 J O Hayat,* 3 E Yazaki, 3 A T Moore, 3 L C Hicklin, 4 P W Detmar, 1 J-Y Kang, 2 O Sfrim. 1Gastroenterology, St. George’s Hospital, London, UK; 2GI Physiology, Barts and the London School of Medicine and Dentistry, London, UK; 3ENT Surgery, St. George’s Hospital, London, UK; 4Technics, Kingston-upon-Un, UK

Introduction It is suggested that hoarseness along with typical signs on laryngoscopy can be caused by oesophago-pharyngeal reflux, often referred to as LPR. New methods are proposed to assess pharyngeal exposure to gastric contents. They are suggested to measure (1) liquid or mixed gas-liquid acid and non-acid reflux (HMII-pH), (2) aerosolized acid reflux (Dx-pH measuring system, Restech), and (3) presence of pepsin in saliva. We aimed to quantify pharyngeal exposure to gastric contents in patients with hoarseness and healthy controls using the above techniques.

Methods 21 patients with hoarseness and a positive laryngoscopy (mean age: 51 range: 23–75) and 10 asymptomatic controls (mean age: 26, range: 21–34) underwent simultaneous HMII-pH monitoring, oropharyngeal pH monitoring and saliva pepsin sampling. The HMII-pH catheter was located with impedance sensors in the oesophageal body, 5–5 cm distal and 0–2 cm proximal to the UOS. The Dx-pH catheter was located posterior to the uvula and pepsin in saliva was measured using an in vitro device utilising two pepsin monoclonal antibodies (RepTest) at five different times during the 24-h period. Patients were studied “off” PPI.

Results Healthy controls had (1) no liquid or mixed gas/liquid reflux in the pharynx, (2) two controls had +ve Dx-pH and (3) two controls had more than one saliva sample +ve for pepsin with the other tests negative. Patients were classified into four groups: (a) all tests +ve (n=2); (b) two tests +ve (MII-pH + pepsin (n=5) or MII-pH + Dx-pH (n=3); (c) all tests negative (n=3); and (3) patients with +ve Dx-pH or pepsin without evidence of HMII detected reflux. These patients were considered negative (n=6). Dx-pH drops were poorly associated with HMII-pH reflux. 11% of Dx-pH drops to pH<4, 15% of pH drops to pH<5 and 10% of pH drops to pH<5.5 coincided with HMII detected liquid or gas reflux in the oesophageal body. The detection of pepsin in saliva occurred in 7/10 patients with acid or non-acid HMII detected reflux. Positive pepsin saliva samples were preceded by more reflux events in the previous 60 min S (1–4) than negative samples 0 (0–2) p<0.0001.
Conclusion We identified a subgroup of patients with hoarseness with objective detection of oesophago-pharyngeal reflux (10/21). (b) the majority of oropharyngeal pH drops detected by Dp-pH do not correlate with retrograde flow (liquid or gas) in the oesophageal body. (c) Detection of pepsin in saliva suggests the likelihood of reflux episodes in the previous 60 min.

Competing interests None declared.

PTU-187 LONG-TERM QUALITY OF LIFE AFTER OESOPHAGECTOMY FOR CANCER: COMPARISON OF CERVICAL VS MEDIASTINAL Anastomoses
doi:10.1136/gutjnl-2012-302514c.187

1 J H Bennett,* 2 J Wormald, 3 M Van Leuven, 4 M Lewis. 1General and Upper GI Surgery, Norfolk and Norwich University Hospital, Norwich, UK; 2UEA Medical School, UEA, Norwich, UK; 3Thoracic Surgery, Norfolk and Norwich University Hospital, Norwich, UK

Introduction With improvements in neoadjuvant therapy and earlier diagnosis, long-term survival after oesophagectomy for adenocarcinoma is becoming more frequent. With longer survival the quality of life (QOL) of patients post resection has become a greater priority. There has been extensive debate focusing on the long term effects of different sites for anastomosis. We aimed to examine if post-oesophagectomy QOL is affected by the site of the surgical anastomosis.

Methods QORTC C-30 and OG-25 QOL questionnaires were analysed from post-oesophagectomy patients surviving >5 years. Data were available both from a prospective database and questionnaires sent to post-oesophagectomy patients.

Results Surgery was completed by two surgical teams and data were analysed in subsets dependant on the site of oesophago-gastric anastomosis—either thoracic or cervical. No patients underwent formal pyloroplasty. Data were analysed using the Student t test on SPSS statistical software. QORTC C-30 data were compared against the reference tables for oesophageal cancer pre-treatment and a cohort of pre-surgical patients awaiting oesophagectomy. Ethical approval was granted by the local MREC.

Conclusion There is no significant difference in QOL scores between oesophagectomy patients with cervical or thoracic anastomosis at >5 years post-surgery when analysed using the QORTC C-30 and OG25 questionnaires. QOL in long-term survivors after oesophagectomy compares favourably with QORTC reference data for both pre-treatment oesophageal cancer and baseline general population reference data. Functional indices and symptom scores are improved for our cohort compared to the QORTC oesophageal cancer reference baseline except symptom scores for diarrhoea and dysphonia which worsen post-operatively.

Competing interests None declared.

PTU-188 "KNITTED" OESOPHAGEAL STENTS: SUPERIOR CONFORMABILITY WITH NO TRADE OFF
doi:10.1136/gutjnl-2012-302514c.188

1 J R Cain,* 1 T Westwood, 2 C Gordon, 3 R A Frost, 4 H-L Laasch. 1Radiology, The Christie NHS Foundation Trust, Manchester, UK; 2Gastroenterology, The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust, Bournemouth, UK; 3Radiology, Salisbury NHS Foundation Trust, Salisbury, UK

Introduction Knitted enteral stents have reduced stent shortening and no axial straightening forces, resulting in better conformability...