stomach between 1 October 2007 and 30 June 2009. For patients receiving palliative oncology, we compared characteristics of completers and non-completers of chemotherapy using \( \chi^2 \) tests and multiple logistic regression models with correction for cluster sampling. For variables with missing data we imputed values using multiple imputation by chained equations.

**Results** Of 16264 patients participating in the NOGCA in England, 2513 received palliative chemotherapy treatment. Female patients or patients of older age were less likely to receive treatment. Overall, only 39.7% completed their treatment. Factors associated with treatment completion were low performance status, high age and high level of deprivation. In our study, treatment completion was not related with site of cancer, pre-treatment stage, sex, comorbidities or histology.

**Conclusion** Completion rates of palliative chemotherapy in patients with oesophago-gastric cancer are low. The low completion rates may reflect the complex medical decision making for this group of patients and the need to balance survival benefits, toxicity of treatment, patients’ preferences and patients’ quality of life. Patients unlikely to complete chemotherapy may be more appropriately managed on a palliative supportive care pathway with symptom control.

**Competing interests** None declared.

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**PWE-023**

### PROGNOSTIC SIGNIFICANCE OF CIRCUMFERENTIAL RESECTION MARGIN STATUS IN OESOPHAGEAL CANCER—A SYSTEMATIC REVIEW AND META-ANALYSIS

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**Introduction** The status of the circumferential resection margin (CRM) in oesophageal cancer has been suggested as a prognostic factor but the reports are conflicting. Also, there are two methods of defining positive CRM—within 1 mm (Royal College of Pathologists, RCPath UK)\(^1\) and 0 mm (College of American Pathologists, CAP).\(^2\)

**Methods** A systematic review was carried out using a pre-defined protocol and papers that met the inclusion criteria were selected. Data extracted from those with required adjusted HR for meta-analysis using STATA-11 statistical software. Assessments were made for heterogeneity, publication bias, small study effects and sensitivity analysis for influence.

**Results** Fourteen cohort studies\(^3\)\(^\text{-}^6\)\(^,\)\(^7\)\(^\text{-}^9\)\(^\text{,}^10\)\(^\text{-}^15\) were systematically reviewed but nine\(^4\)\(^,\)\(^9\)\(^\text{-}^10\)\(^\text{-}^15\) meta-analysed. Abstract PWE-023 table 1 shows the results of the pooled overall and CRM criteria sub-group estimates. There was significant heterogeneity between the studies (p-value=0.001 and \( I^2 \) value of 74.8%). There was evidence of publication bias and small study effects (Egger’s test p value 0.029). None of the studies had undue influence.

**Conclusion** This meta-analysis provides evidence that the CRM status in oesophageal carcinoma has prognostic significance. This significance is present irrespective of the criteria used for defining the margin but the estimate for the 0 mm CAP criterion is much higher than those of the within 1 mm RCPath criterion. The overall HR of 1.58 (95% CI 1.40 to 1.79) suggests patients with positive CRM have 60% more risk of death compared to patients with a negative margin. The significant heterogeneity and publication bias are limitations to the study and the former in particular requires further analysis.

**Competing interests** None declared.

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**PWE-024**

### PREVALENCE, MANAGEMENT AND OUTCOME OF SUBMUCOSALLY INVASIVE CANCERS IN A WESTERN OESOPHAGOGLASTIC EMR POPULATION

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**Introduction** Risk of lymph node metastases depends on good or bad prognostic features of submucosally (SM) invasive cancer specimen following endoscopic resection (ER). Invasion limited to SM1 level, lack of lymphovascular invasion and well differentiated grade are good prognostic features and may indicate that radical resection is not required following ER. However, depth of SM invasion can be very difficult to assess in ER specimens and hence a “safe” strategy would be to offer radical surgery to all patients with SM invasive disease, irrespective of other features. This is the policy we follow. We aimed to evaluate the outcome of these cancers in an ER population.

**Methods** All Upper Gastrointestinal ER procedures for the period 2005—2011 were recorded on a prospective database. All procedures were carried out by a single skilled endoscopist. Demographic data, histology, procedure success, long-term outcome and complications were assessed. Careful endoscopic assessment using chromoendoscopy, plus CT/EUS where appropriate, were performed prior to attempted endoscopic resection and afterwards if indicated.

**Results** Cancer with submucosal invasion was detected in 26 of 125 (21.1%) cases of oesophagogastric neoplasia. 22 patients were male and the mean age was 75.2 years (range 54–84 years). Submucosal invasion was present in 16 of 74 (21.6%) lesions arising in Barrett’s
oesophagus, 4 of 7 (57.1%) oesophageal squamous lesions and 6 of 39 (15.3%) gastric lesions. All patients were discussed at a multidisciplinary meeting and those patients who were fit were offered radical surgery or chemoradiotherapy. Six patients who were offered radical surgery opted for conservative management with endoscopic follow-up. 14 patients proceeded to radical surgery; six of these had no residual cancer in surgical specimen and eight had residual cancer present. 11 of the 14 are currently in disease free survival, two died of recurrence and one died of post-operative complications. Two patients received radical chemoradiotherapy; one is in disease free survival, the other died of advanced adenocarcinoma. One patient received radical radiotherapy and remains free of recurrence. Nine patients received conservative/endothelial management; of these seven had disease free survival, two died of metastatic adenocarcinoma. Mean follow-up was 52 months.

Conclusion Our results show that submucosal invasion is found in a significant proportion of patients undergoing upper gastrointestinal ER. Management of SM invasive cancer following ER remains challenging and our series shows a wide variation in management outcomes. Further research to guide the optimum management of this group of patients is required.

Competing interests None declared.

PWE-025 POST-RADIOThERAPY PHARYNGEAL/PROXIMAL OESOPHAGEAL STRICTURES IN HEAD AND NECK MALIGNANCY: OUTCOME OF ENDOSCOPIC BOUGIE DILATION
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Introduction Chemo-radiotherapy is the standard of care for most patients with head and neck malignancy. Radiotherapy may lead to dysphagia due to pharyngeal/proximal oesophageal strictures. Endoscopic management of these strictures with antegrade dilation by using Savary Gilliard bougie dilators is described in literature.¹² Our aim was to review the outcome in patients referred for bougie dilation for radiotherapy induced strictures.

Methods It is a retrospective case notes review.

Results 11 patients underwent bougie dilation of radiotherapy induced strictures in last 4 years. Nine male, two female patients with median age of 71 years. Five patients had laryngeal cancer and six had oropharyngeal cancer. All patients had radiotherapy where four had concurrent chemotherapy. Five patients required flouroscopy and seven patients required nase endoscope. Median size of initial bougie size was 11 mm and final bougie size was 17 mm. Mean number of procedures per patient was 4. No complications noted. While three patients had good response, six had borderine and two had none. Median interval from completion of radiotherapy to index procedure was 2.5 years with range from 2 months to 12 years.

Conclusion Savary Gilliard bougie dilation appears to be safe and well tolerated method for dilating pharyngeal/proximal oesophageal strictures secondary to radiotherapy for head and neck cancer. While symptom improvement varied among patients probably early intervention might benefit the patient.

Competing interests None declared.

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