Methods Analysis of prospectively collected data on demographics (age, sex) and symptoms (including duration and level of dysphagia, type [solids/liquids, progressive/intermittent], associated symptoms [weight loss, reflux, regurgitation] and outcomes of investigations of 2000 consecutive referrals for dysphagia. Logistic regression determined significant variables for predicting PPs. A consultant ENT surgeon reviewed all barium swallows of PP patients. The local ethics committee ruled the study was within the remit of audit.

Results 1775 patients were investigated through the DHL, 37 with PP (1.9% of total, 2.1% of those investigated). One of these was a re-referral, 6 years after initial pouch stapling. 20 were male (54%), mean age 80.1 years (range 58–103 years). Mean age of all patients was 68.1 years (range 17–103), 48.5% male. Two patients had PPs and oesophageal cancer. On logistic regression only age greater than 73 years and symptoms of dysphagia greater than 26 weeks were predictive of PP as final diagnosis (p < 0.001 and 0.005 respectively). Weight loss (5.4 vs 28.5%) and reflux (45.9% vs 60.6%) were less common in PP patients and regurgitation more so (62.2% vs 52.1%) but none of these were significant.

Abstract PTU-147 Table

		Pharyngeal pouch (%)	All dysphagia (%)
Level of dysphagia	Pharyngeal/combination	83.8	25.6
	Midsternal	16.2	30.4
	Lower/combination	0	42.3
Type of dysphagia	Intermittent	49	44
	Progressive	43	30
	Solids only	81.1	79.7
	Both	18.9	19.7
Duration of dysphagia	< 26 weeks	51.3	74.8
	> 26 weeks	48.7	25.1

Conclusion Pharyngeal pouches in a dysphagic population are more common than previously recognised. Most though not all have pharyngeal level dysphagia. Where gastroscopy was performed as initial investigation, the procedure was likely to be incomplete although no complications occurred. Just over 50% of the PPs were thought likely to be the cause of dysphagia but less than 50% of these underwent surgery (stapling).

Disclosure of Interest None Declared

REFERENCES

- Melleney EM, Subhani JM, Willoughby CP. Dysphagia referrals to a District General Hospital Gastroenterology unit: hard to swallow. Dysphagia 2004; 19:78–82. doi:10.1007/s00455-003-0501-0
- Murray IA, Waters C, Maskell G, Despott EJ, Palmer J, Dalton HR Improved clinical outcomes and efficacy with a nurse-led dysphagia hotline service. Frontline Gastroenterol. In press.

PTU-148 EFFICACY OF EARLY CANCER SCREENING IN BARRETT'S OESOPHAGUS

doi:10.1136/gutjnl-2013-304907.238

^{1,*} J Faulkner, ¹R Ley Greaves, ¹J Hoare. ¹Gastroenterology, Imperial College London, London, UK

Introduction The British Society of Gastroenterology recommends biennial endoscopic screening of patients with known Barrett's. Despite being widely employed the efficacy of surveillance is contested as the assumed 0.5% per year progression from metaplasia to cancer is disputed.(1) This study aims to evaluate the

efficacy of detection of Barrett's related cancer through screening within the Imperial College NHS Trust.

Methods We retrospectively analysed endoscopy and pathology reports of all patients who received an endoscopy for Barrett's oesophagus within a 5 year period from 2007 to 2012. Patients presenting with established dysplasia or adenocarcinoma were excluded and only those with confirmed Barrett's oesophagus were considered. The surveillance regime in this period was in accordance with the British Society of Gastroenterology guidelines. All endoscopies were conducted by Imperial College NHS gastroenterologists within Imperial Trust sites.

Results Over 54 months 326 patients underwent endoscopic surveillance of Barrett's oesophagus with a mean follow-up of 36 months. 73 (22%) patients stopped surveillance in this period. Early Adenocarcinoma and High Grade Dysplasia was reported in 2 (0.6%) and 3 (0.9%) patients respectfully. Providing a 0.2% progression to adenocarcinoma per year and a 0.5% progression to High Grade Dysplasia or cancer per year. This gave a cancer incidence in Barrett's oesophagus of 1 per 492 patient years of surveillance. All three of the HGD patients underwent endoscopic therapy and have successfully eradicated dysplasia and Barrett's. Both cancer patients were unsuitable for endoscopic therapy. 1 received surgical treatment and 1 received radiotherapy.

Conclusion The risk of progression to cancer is lower than previously anticipated. We estimate the cost of a single surveillance endoscopy at £400, thus surveillance costs are £124,000 per cancer diagnosis. The mean age of adenocarcinoma diagnosis through surveillance is 68.1(2) and with average male life expectancy of 78, the cost of diagnosis is approximately £12,400 per year saved. This assumes all cancers detected via surveillance are curable and does not account for any subsequent treatment or follow-up costs, therefore this is likely to be a fractiont of the true cost. NICE state that £20,000-£30,000 is a cost-effective range per quality adjusted life year saved. In light of this we recommend a more stratified, cost effective screening programme be considered.

Disclosure of Interest None Declared

REFERENCES

- Kahrilas PJ. The Problems with Surveillance of Barrett's Esophagus. The New England journal of medicine 2011; 365(15); pp. 1437–1438.
- Hvid-Jensen F, Pedersen L, Drewes AM, Sørensen HT, Funch-Jensen P. Incidence of adenocarcinoma among patients with Barrett's oesophagus. New England Journal of Medicine 2011; 365(15): pp. 1375–1383.

PTU-149 IS PEPSIN DETECTED IN THE SALIVA OF HEALTHY INDIVIDUALS?

doi:10.1136/gutjnl-2013-304907.239

1. J O Hayat, ²A Woodcock, ²P Dettmar, ³E Yazaki, ¹J-Y Kang, ³D Sifrim. ¹Gastroenterology, St. George's University of London, London; ²Technostics Ltd, Hull; ³Wingate Institute of Neurogastroenterology, Barts and the London School of Medicine and Dentistry, London, UK

Introduction The presence of pepsin in the oesophagus or more proximally (pharynx or airways) suggests gastro-oesophageal reflux (GOR). However, appropriate normal values and correlation with acid and non acid reflux are still limited. The **aim** of this study was to measure pepsin in expectorated saliva together with objective assessment of GOR by pH-impedance in a large cohort of healthy asymptomatic subjects.

Methods 100 healthy subjects, age 30.7 (range 19–55), BMI 23.7 (17.7–32.8) with no typical or atypical reflux symptoms underwent MII-pH monitoring "off" PPI. Oesophageal pH was measured 5 cm above the LOS and impedance sensors were positioned at 3.7.9.12 and 15 cm above LOS. Subjects collected expectorated saliva on waking, one hour after lunch and one hour after dinner. Saliva was