

which were in palliative group. Over a third were alive at 1 year (1 year survival of 35%) and a further 2 patients are alive but yet to reach the 1 year end point.

Conclusion Colonic stenting by experienced operators for proximal CRC using TTS can be performed successfully and safely. It negated the need for emergency surgery with successful discharge of 81% of patients. These results are important when interpreting the RCT, when considering palliation and the developments of neo-adjuvant chemotherapy strategies in Bridge group.

Disclosure of Interest None Declared.

PTH-052 MICROSCOPIC COLITIS IS EXPENSIVE TO DIAGNOSE: AN ANALYSIS OF THE UTILITY OF RANDOM COLONIC BIOPSIES

doi:10.1136/gutjnl-2013-304907.539

¹S Pannick, ¹S Chaggar, ¹A Dehn Lunn, ¹I Beveridge, ¹K Monahan, ¹K Sundaram, ¹C Collins, ¹J Mawdsley. ¹Department of Gastroenterology, West Middlesex University Hospital, Isleworth, UK

Introduction Microscopic colitis is reported in up to 9.5% of patients with watery diarrhoea, and in almost 20% of those older than 70¹. The Joint Advisory Group on GI Endoscopy mandates diagnostic colorectal biopsies in patients with persistent diarrhoea. However, the Royal College of Pathologists advises that biopsies be taken only in the "correct clinical setting... usually in a middle-aged or elderly (often female) patient"². We examined our local incidence of microscopic colitis and the cost of universal biopsies, and sought to identify factors that could be used to reduce the number of biopsies required.

Methods We performed a retrospective analysis of patients investigated for diarrhoea at West Middlesex University Hospital between 1/1/2011 and 31/12/2012, where colonic biopsies were taken to exclude microscopic colitis. The patient cohort, and their endoscopic and histological findings, were drawn from the hospital's electronic medical records. Patients whose biopsies were taken for inflammatory bowel disease assessment were excluded. Those patients with a new diagnosis of microscopic colitis were identified. The estimated cost of processing 4 colonic biopsies was £55.

Results 616 patients were identified who underwent biopsies to exclude microscopic colitis during the study period. The mean number of biopsies per patient was 3.1. A total of 2056 diagnostic colonoscopies were performed in our unit during this interval; biopsies for this indication were therefore required in 30% of cases. The cost of these biopsies was around £26,700. 9 cases of microscopic colitis were identified (median age 58; interquartile range 47.5–76.5; 3 males and 6 females), with an overall incidence of 1.5%. Incidence increased with age (see table). There were no significant differences between the patients with microscopic colitis and those with other diagnoses in terms of sex or number of biopsies.

Abstract PTH-052 Table 1

Age range (years)	Incidence of microscopic colitis (%)	Cost per case of microscopic colitis (£)
< 35	0/130 (0)	N/A
< 40	1/186 (0.53)	8400
< 45	1/237 (0.42)	10700
< 50	2/301 (0.67)	6800
< 55	3/365 (0.82)	8200

Conclusion Biopsies for this indication are required in a high percentage of diagnostic colonoscopies, with significant resultant costs (£13,300 per annum). Our local incidence of microscopic colitis is far lower than that published in the literature, suggesting we may be over-biopsying. We could not justify restricting biopsies to female patients, but a minimum age criterion might be appropriate.

Disclosure of Interest None Declared.

REFERENCES

- Olesen *et al.* Microscopic colitis: a common diarrhoeal disease. *Gut* 2004; 53:346–350.
- Howat *et al.* Histopathology and cytopathology of limited or no clinical value. Royal College of Pathologists. Report number: 2, 2005.

PTH-053 HIGH DEFINITION (HD) VERSUS STANDARD DEFINITION (SD) WHITE LIGHT ENDOSCOPY FOR DETECTING EARLY NEOPLASIA (EN) IN BARRETT'S OESOPHAGUS (BO) DURING SURVEILLANCE ENDOSCOPY. IS IT TIME TO CHANGE THE STANDARD OF CARE?

doi:10.1136/gutjnl-2013-304907.540

¹S Sami, ²V Subramanian, ³W M Butt, ¹G Bejkar, ³J Coleman, ⁴J Mannath, ¹K Ragu-nath. ¹Nottingham Digestive Diseases Centre, University of Nottingham, UK, Nottingham; ²Gastroenterology, Leeds Teaching Hospitals NHS Trust, Leeds; ³University of Nottingham, UK, Nottingham; ⁴Gastroenterology, University Hospitals Coventry and Warwickshire NHS Trust, Coventry, UK

Introduction HD endoscopy systems provide superior image resolution. However, the utility of this new and more expensive technology in lesion detection has not been evaluated so far.

Our aim was to assess whether using a HD endoscopy system translates to better outcomes compared to the SD system in terms of detecting EN in patients with BO.

Methods The study included consecutive patients with non-dysplastic BO undergoing surveillance endoscopy between September 2008 and August 2012. Procedures were performed at the Nottingham University Hospitals NHS Trust using Olympus video endoscopy system (240 and 260 series with SD and HD gastroscopes and monitors) across two hospital sites. Data was retrieved from the hospitals' endoscopy electronic database.

Patients' demographics, operator experience, endoscopy and histopathology findings were recorded. We excluded cases if other advanced imaging techniques were used or if cancer was diagnosed on index endoscopy.

Logistic regression was performed to estimate adjusted odds ratios (aOR) and 95% confidence intervals (CIs) comparing outcomes with HD and SD systems. Statistical models included the following potential confounders, chosen a priori based on the literature: number of biopsies taken; Male sex; trainee versus non-trainee endoscopist; HD versus SD system; BO length; and older age.

Results The database search revealed 946 procedures, out of those, 425 were excluded. Data was analysed for the remaining 521 procedures (HD group n = 255, SD group n = 266). Age and sex distribution was similar for both groups.

The HD system was superior to the SD system in the targeted detection of dysplastic lesions (aOR 3.27, 95%CI 1.27–8.40) as well as all dysplasia -random and target- (aOR 2.36, 95%CI 1.50–3.72). More false positive lesions (those with no dysplasia on target biopsies) were detected with the HD system (aOR 1.16, 95%CI 1.01–1.33) and it had a marginally higher yield of dysplasia on random biopsies alone (aOR 1.07, 95%CI 1.00–1.15). There was no benefit from the HD system in diagnosing all (random and target) high grade dysplasia (HGD) or cancers compared to SD endoscopy (aOR 0.93, 95%CI 0.83–1.04).

Trainee endoscopists, number of biopsies and male sex were also associated with a statistically significant higher yield of dysplastic lesions.

Conclusion The use of the HD endoscopy system is associated with better targeted and any dysplasia detection during surveillance endoscopies for BO and is independent of other factors. Endoscopists performing surveillance for BO should consider using HD endoscopies.

Disclosure of Interest S. Sami: None Declared, V. Subramanian: None Declared, W. Butt: None Declared, G. Bejkar: None Declared, J. Coleman: None Declared, J. Mannath: None Declared, K. Ragu-nath Grant/Research Support from: Olympus (Keymed, UK).