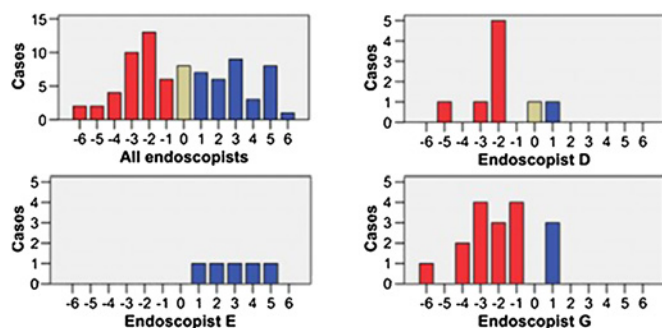


retrieved intact, where both endoscopic and measured sizes were recorded, and where the measured size was 5 to 15 mm were included. The direct measurement was subtracted from the visual estimate to give a size difference. The paired-sample t-test was used to test the null hypothesis that there was no difference between the mean sizes determined using the two methods for the group as a whole or for individual endoscopists.

**Results** In a total of 4285 procedures, 79 polyps met the criteria for inclusion. In 39 cases (49%), the difference between visual estimate and direct measurement was >2 mm. In ascertaining whether a polyp was above or below the 10 mm cut-off, visual estimate and direct measurement were discordant in 21 cases (27%). Despite these disparities, there was no overall tendency to over or underestimate polyp size for the group as a whole (mean difference 0.05 mm  $p=0.88$ ). Of the 15 individual endoscopists, the two with the highest procedure counts both showed significant tendencies to underestimate polyp size, while a third showed significant overestimation.

**Conclusion** In clinical practice, visual estimation of polyp size is often inaccurate. Individual endoscopists may systematically over or underestimate polyp sizes. Direct measurement should be preferred in determining surveillance intervals.



Abstract PTU-204 Figure 1 Visual estimate—direct measurement (mm).

Abstract PTU-204 Table 1

Endoscopist	Polyp count	Mean difference (mm)	p Value
D	9	-1.9	0.01
E	5	3.0	0.01
G	17	-1.9	0.001

**Competing interests** None declared.

## REFERENCES

1. **National Institute for Health and Clinical Excellence.** *Colonoscopy Surveillance for Prevention of Colorectal Cancer*. 2011. <http://www.nice.org.uk/guidance/CG118>
2. **Schoen, et al.** The pathologic measurement of polyp size is preferable to the endoscopic estimate. *Gastrointest Endosc* 1997;**46**:492–6.

PTU-205

## PRE-MEDICATION WITH N-ACETYLCYSTEINE AND SIMETHICONE IMPROVES MUCOSAL VISUALISATION DURING GASTROSCOPY. A RANDOMISED, CONTROLLED, ENDOSCOPIST-BLINDED STUDY

doi:10.1136/gutjnl-2012-302514c.205

J Neale,\* S James, P Patel. *Gastroenterology, Southampton Hospitals NHS Trust, Southampton, UK*

**Introduction** The detection of early cancer during gastroscopy in the western world is poor. UK studies have demonstrated up to a 15% miss rate during diagnostic gastroscopy for early neoplasia. Early

gastric cancer has a vastly superior survival rate and may be amenable to endoscopic resection. Diagnostic gastroscopy provides a unique opportunity to diagnose early gastric neoplasia, whatever the indication; however intraluminal mucus and saliva can obscure mucosal visualisation and potential detection of these lesions. The aim of this study was to investigate whether the use of a premedication solution containing the mucolytic agent N-acetylcysteine and the surfactant simethicone improves mucosal visualisation within an unselected UK diagnostic gastroscopy service.

**Methods** 75 consecutive patients were recruited from a single endoscopist's diagnostic gastroscopy list. These were randomised into three groups. 1: Standard control—clear fluids only for 6 h, NBM for 2 h. 2: Placebo control—standard control + 100 ml sterile water (given 20–30 min prior to gastroscopy). 3: Solution—standard control + 100 ml investigated solution (20–30 min prior). The endoscopist was blinded to patient preparation. Inadequate mucosal visualisation was measured by assessing fluid/mucus during gastroscopy that could not be suctioned and required flushing with water. The volume of flush, the site at which it was used and the procedure time were recorded.

**Results** All three groups showed no statistical difference for age, gender, priority or indication. The mean volume of flush required to obtain clear mucosa was significantly less in the *solution* group (12.1 ml (3.5–20.7)) compared to the *standard control* group (54.2 ml (39.2–69.2),  $p<0.00003$ ) and the *placebo control* group (61.0 ml (44.6–77.4),  $p<0.00001$ ). This significant difference was identified across all sites recorded in the upper GI tract, bar the OGJ where very little stubborn mucus was identified in all three groups. 61% of the *solution* group required no flushing at all, significantly more than the *standard control* group (13%,  $p<0.002$ ) and the *placebo control* group (9%,  $p<0.0005$ ). Mean procedure time was less in the *solution* group (8.5 min (7.1–9.9)) compared with the *standard control* (10.4 min (8.5–12.3),  $p<0.075$ ) and *placebo control* groups (10.5 min (9.3–11.7),  $p<0.028$ ). When patients on Barrett's surveillance are excluded this is more significant. *Solution* (7.2 min (6.2–8.2)) vs *standard control* (8.8 min (7.3–10.1),  $p<0.041$ ) vs *placebo control* (10.2 min (8.6–11.8),  $p<0.0031$ ).

**Conclusion** Premedication with NAC and simethicone is a low cost and well-tolerated method of dramatically improving visibility and procedure time during diagnostic gastroscopy. This simple intervention may improve detection of early gastric cancer.

**Competing interests** None declared.

PTU-206

## STENT EXPULSION IN DIAGNOSTIC ERCP

doi:10.1136/gutjnl-2012-302514c.206

- <sup>1</sup>J Nicholson,\* <sup>1</sup>A Amin-Nejad, <sup>1</sup>S Harrison, <sup>1</sup>W Greenhalf, <sup>1</sup>R Sutton, <sup>1</sup>J Neoptolemos, <sup>2</sup>S Sarkar, <sup>2</sup>H Smart, <sup>2</sup>J Evans, <sup>2</sup>M Lombard. <sup>1</sup>EUROPAC, NIHR PBRU, Liverpool, UK; <sup>2</sup>Gastroenterology, RLBHT, Liverpool, UK

**Introduction** Patients who have a high risk of developing pancreatic cancer (FPC) may have pre-malignant molecular changes and have been enrolled in a EUROPAC Study to conduct diagnostic ERCP for the collection of pancreatic juice.<sup>1,2</sup> These otherwise healthy patients have been identified as a higher risk group for ERCP-induced pancreatitis.<sup>3</sup> To reduce the incidence of post-ERCP pancreatitis a self-expelling plastic stent is routinely inserted into the pancreatic duct after ERCP. Stents have been shown to reduce pancreatitis in small cohorts but previous spontaneous intraluminal migration has been quoted at 67% for pancreatic stents.<sup>4,5</sup>

**Methods** Prospective observational study of 24 patients who underwent ERCP and secretin stimulated collection of pancreatic juice as part of the EUROPAC study. No pancreatic or biliary disease was present. In all patients a plastic stent was inserted (3 cm 5 Fr Zimmon, Cook Medical®) to avoid post-ERCP pancreatitis. Plain