

Abstracts

PTH-050

ROBOT MAGNET-CONTROLLED UPPER GI CAPSULE ENDOSCOPY USING THE ANKON NAVICAM® SYSTEM: FIRST REPORTED EXPERIENCE OUTSIDE CHINAH-L Ching*, MF Hale, R Sidhu, ME McAlindon. *Academic Unit of Gastroenterology, Royal Hallamshire Hospital, Sheffield Teaching Hospitals, Sheffield, UK*

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Introduction Gastroscopy (OGD) is invasive and not always well tolerated. Capsule endoscopy of the upper GI tract might be possible if effective control allowed movement to all areas of the stomach which, unlike the small bowel, is capacious and irregular in shape. The NaviCam® (Ankon Technologies Co, Ltd Wuhan, Shanghai, China) contains magnetic material and can be controlled by an external robot magnet, the polarity and proximity of which can be manipulated using joysticks. Two frames per second allow real-time visualisation. A Chinese multicentre study has shown a high sensitivity and specificity for detecting focal gastric lesions when compared to OGD (1). In this study, imaging quality and patient tolerance of upper GI examination using the robot magnet-controlled NaviCam® was assessed.

Method Patients with symptoms of dyspepsia swallowed 100mls of water containing 10mls simethicone 15 min prior to 1L of water followed by the NaviCam®. Both clarity of gastric views and adequacy of gastric distension were assessed (1, poor; 2, reasonable; 3, good), as was completeness of views of all areas of the gastric mucosa (1, >75% obscured; 2, >50% obscured; 3, <50% obscured; 4, <25% obscured; 5, 100% visualised). Patient tolerance scores were also collected.

Results The mean age of the eight participants was 47.1±20.4 (75% male). The NaviCam® could be held stationary in the presence of peristaltic waves and could be moved proximally using a preset magnetic programme activated by a 'shoot' button on the joystick which caused the capsule to cartwheel proximally over the rugal folds to a chosen proximal location. Mean duration of examination was 25±7 mins. Mean clarity and distension scores of 2.5±0.5 and 2.9±0.3 were achieved. Completeness of view was 5±0 for the gastric cardia, fundus, greater and lesser curvature, anterior and posterior wall, antrum and pylorus. Few oesophageal images were obtained and duodenal images were not assessed during the live examination (but are provided following passage of the capsule through the pylorus). Three examinations were normal. Gastritis and cystic fundic gland polyps were diagnosed in 2 and 3 cases respectively. Anxiety, discomfort and pain scores (worst-best=0–10) were 1±0, 1.3±0.6, and 1±0 respectively.

Conclusion The NaviCam® demonstrates excellent control and gastric views and is extremely well tolerated. Greater frame acquisition rate is likely to improve oesophageal visualisation.

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IMPACT OF A DEDICATED BARRRETT'S OESOPHAGUS LIST ON REDUCING SURVEILLANCE ENDOSCOPIES AND COST IMPLICATIONS

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Introduction Barrett's Oesophagus (BO) is a risk factor for oesophageal adenocarcinoma (OAC). London Cancer Alliance published guidelines for dedicated Barrett's surveillance list with advanced imaging techniques which was adopted by Croydon in June 2015 with a single operator monthly list. While the focus was on identifying dysplasia/early cancer, we opted to analyse the impact of a dedicated surveillance list on patients with a low risk of cancer progression who could be discharged back to primary care and the potential cost savings that could be made.

Method We analysed a prospective database of all patients who had a gastroscopy on a dedicated BO surveillance list from June 2015 to December 2016. Patients with <2m BO without intestinal metaplasia (IM) on histology were discharged back to primary care. Based on the life expectancy of males being 78 years and females 82 years (2015), average cost savings for endoscopy every 5 years was calculated based on the tariff in 2016.

Results Out of 85 patients, 62 (73%) were males. Average age for males was 65 and 68 years for females. All patients had PPI as regular treatment. 59 (69%) patients had IM, The mean Prague 'C' length was 1.9 cm while 'M' was 3.6 cm. Four patients had indefinite for dysplasia out of which 3 were referred to tertiary care centre and 1 was downgraded on repeat endoscopy. One patient had OAC. 20 (24%) patients with <2 cm BO with no IM were discharged from surveillance. Based on a tariff of £420 for gastroscopy with biopsies, 34 gastroscopies in males (£14280) and 30 in females (£12600) were avoided thus resulting in cost savings of about £27 000 on the assumption that surveillance would have continued till their life expectancy with the tariff remaining the same.

Conclusion We recognise that the patients who were taken off the dedicated surveillance list may have been taken off anyway if they had an endoscopy on a normal service list. However assessment of these patients on a dedicated list has ensured uniformity of follow-up surveillance endoscopy and discharge. Lack of awareness and adherence to updated guidelines by various grades of health professionals might have resulted in unnecessary endoscopies. There are potential cost savings although it would be difficult to quantify them accurately because of variable factors. Strict adherence to guidelines would also increase capacity for endoscopy units in the face of rising demand.

Disclosure of Interest None Declared

PTH-052

OESOPHAGOGASTRODUODENOSCOPY (OGD) AFTER ABNORMAL RADIOLOGY FINDINGS. HOW OFTEN DO WE DIAGNOSE AN UPPER GASTROINTESTINAL MALIGNANCY?

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Introduction Computed Tomography (CT) is often an initial investigation when investigating someone for malignancy. Other malignancies can be identified via incidental findings from other modalities such as Magnetic Resonance Imaging (MRI) or



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