

PWE-038 SIGNIFICANCE OF INCIDENTAL GASTROINTESTINAL LESION ON PET SCANF Leet*, M Sharif, A Agrawal. *Gastroenterology, Doncaster Royal Infirmary, Doncaster, UK*

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Introduction CT PET scan with fluorine-18 (F-18) fluorodeoxyglucose (FDG), is a increasingly common investigation in the evaluation and management of several malignant and non-malignant conditions. (1-3). The usefulness of this technique in diagnosing incidental gastrointestinal lesions in literature is scanty. The purpose of this study was to assess the usefulness of PET scan in detecting incidental significant gastrointestinal disease.

Methods 696 PET scans were undertaken in Doncaster and Bassetlaw NHS Trust from 2009 to 2012. The principal indications were malignancy (lung 57%, GI tract 16%, head and neck 7%, haematological 4%, breast 2%) and nonmalignant 11%, unknown indication 3%. Of these, 44 cases (males 61%, median age 70) of incidental increased focal FDG uptake in gastrointestinal tract were detected. All patients underwent endoscopic procedure (Gastroscopy 10, Flexible sigmoidoscopy 10 and colonoscopy 24).

Results 21 of 44 (48%) had polyps (malignant n = 3, tubulovillous adenoma n = 11, hyperplastic n = 6, not retrieved n = 1). Other pathologies included vascular lesions, inflammation, and diverticular disease. 11 patients had a false positive PET scan. The overall correlation between PET scanning and Endoscopic findings were found to be 75%.

Conclusion PET scan is a valuable tool in localising incidental gastrointestinal pathology and a positive incidental finding merits further follow up endoscopy. The technique detected 6% new gastrointestinal lesions of which nearly half were polyps and two-thirds of these were malignant or adenomatous.

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Disclosure of Interest None Declared.

PWE-039 BURIED TREASURE: DEVELOPING AN ACCURATE, LOW COST ASSESSMENT OF FLEXIBLE SIGMOIDOSCOPY COMPLETION USING A HAND-HELD METAL DETECTOR

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Introduction Flexible sigmoidoscopy (FS) is a validated screening test to reduce the incidence of colorectal cancer. Bowel Scope screening is due to be implemented in the UK by 2016. There is variability in FS performance between operators; internal colonoscopic markings are unreliable for colonoscope position. Three dimensional magnetic imaging systems eg Scopeguide™ (Olympus) (SG) represent real time instrument position but are not widely available. Hand-held metal detectors (HHMD) can easily localise metal objects within the body. We assessed use of HHMD to confirm flexible endoscopic tip placement at the splenic flexure (SF).

Methods Adult subjects undergoing outpatient FS/colonoscopy were eligible. When examination was judged complete to the SF, an independent observer placed the HHMD at the left 10th intercostal space, anterior-axillary line (corresponding to the internal fixation of the colon at the SF). A positive result was recorded if the HHMD beeped. Position was then assessed by SG. If SF could not be reached, the patient was excluded. We evaluated 3 HHMD from different manufacturers. Patient experience was also studied. Ethical review NREC no. 13/LO/1065.

Results 44 subjects were recruited consecutively: mean age 64 years (range 17-74), 50% male (n = 22), mean BMI 27 kg/m² (range 20-41). Endoscopic confirmation of position at SF showed concordance with Scopeguide™ in 95% (42/44). Subjects 1-6 were examined using BDS200 (Black and Decker) HHMD. Despite promising results on training models, this proved insensitive in humans and was abandoned. For subjects 7-30 (n = 24) studied with GMS120 (Bosch), positive reading at the correct anatomical marking was recorded in 88% of examinations with SG validation. Of the 3 failures, 2 had a BMI of >30 kg/m². Use of an X-Ray screening trolley improved specificity. For subjects 31-44 (n = 14), a detector with increased sensitivity and directional capabilities, GPP (Garrett Metal Detectors, USA), was used on standard endoscopy trolleys. This showed concordance with SG in 100% of cases (n = 14) including 4 patients with BMI >30 kg/m². There was one true HHMD negative versus endoscopic assessment confirmed by 3D imaging. The technique was further validated by loss of signal on scope withdrawal. Patient questionnaires showed high acceptability.

Conclusion Use of HHMD in FS has shown excellent concordance with Scopeguide™ for colonoscope localisation at SF. Specificity and sensitivity are improved by adapting the specifications of the HHMD. A HHMD is an accurate and very cheap (£100 per unit) means of assuring quality during FS and further studies may confirm its role as a useful training tool especially during future service expansion.

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PWE-040 COMFORT SCORING FOR ENDOSCOPIC PROCEDURES: WHO IS RIGHT – THE ENDOSCOPIST, THE NURSE OR THE PATIENT?

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Introduction Patient experience is a key aspect of endoscopy service quality. It is a Global Rating Scale (GRS) requirement to capture data on patient comfort. In our unit comfort scores are recorded by the endoscopist and by the endoscopy nurse using the Modified Gloucester Scale (1=no discomfort to 5=severe discomfort). Patients do not usually record a score. We suspected there may be differences in comfort assessment between these different groups, which may affect the value of this quality indicator.

Methods Comfort data was prospectively collected from patients undergoing an endoscopic procedure (either an esophagogastroduodenoscopy (OGD), colonoscopy or flexible sigmoidoscopy (FS)), over a three week period (April-May 2013). Endoscopist and nurse recorded scores were collected for each procedure