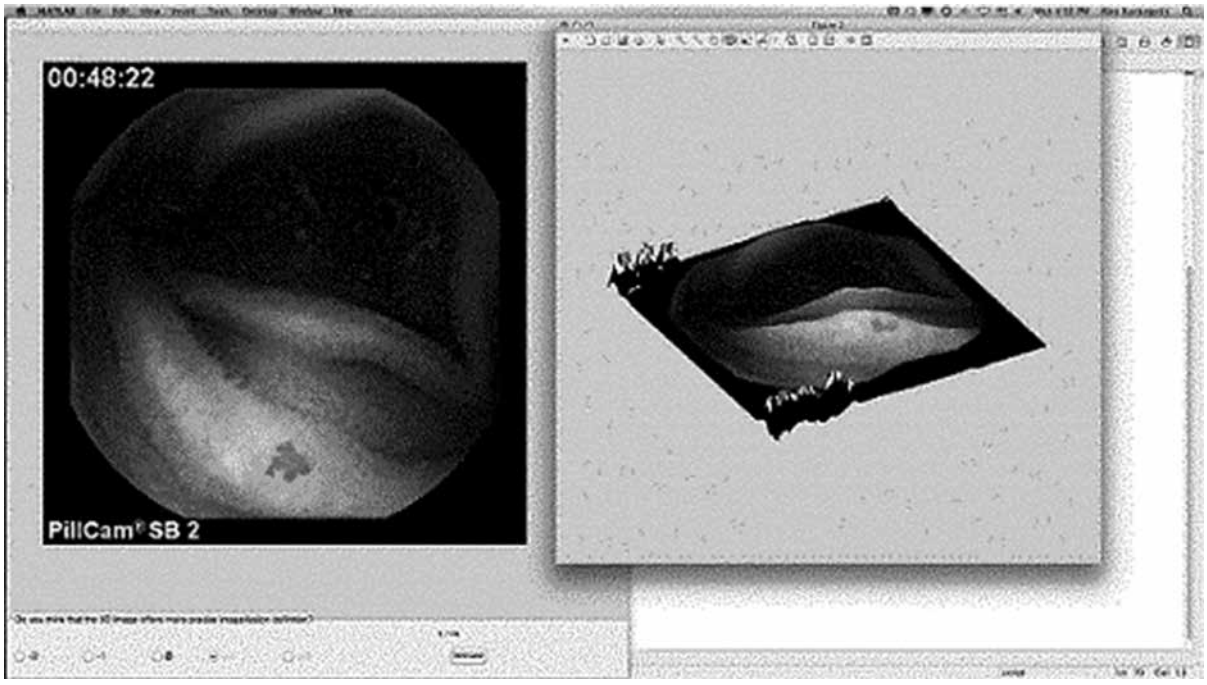

Abstract PTU-021 Figure 1

vascular: *n* = 50; inflammatory: *n* = 73; protruding structures/lesions: *n* = 69) were reviewed with the aid of a purpose-built 3D reconstruction software. Seven endoscopists rated visualisation improved or non-improved (compared to original 2D images) (**Figure 1**). Finally, the following sub-group analyses were performed: type of finding (vascular *vs* inflammatory *vs* protruding), colour of finding and SBCE equipment used (PillCam® *vs* Mirocam®).

Results Overall, phantom experiments showed that the 3D reconstruction software was accurate in predicting the protruding or non-protruding nature for 90% of red, 70% of yellow and 45% of white phantom models. Furthermore, it offered enhanced visualisation for 56% of vascular, 23% of inflammatory and < 10% of protruding structures/lesions ($P = 0.007$, 0.172 and 0.008, respectively). Lastly,when the images were categorised according to the predominant colour of the lesion, 3D software application enhanced 29/54 (53.7%) of red, 12/55 (21.8%) of white, 5/29 (17.3%) of red+white and 5/54 cases (9.2%) of lesions with colour similar to that of the surrounding mucosa, $P < 0.0001$.

Conclusion Application of a 3D reconstruction software in SBCE leads to image enhancement for a significant proportion (56%) of vascular, but less so for inflammatory and protruding lesions. Its integration, as adjunct tool, in CE reviewing software is desirable.

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PTU-022 DOMPERIDONE IMPROVES COMPLETION RATE IN SMALL BOWEL CAPSULE ENDOSCOPY

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Introduction The completion rate of small bowel capsule endoscopy (SBCE) has been reported as 81.3–84.8%.[1] Aside lumenal narrowing, incomplete SBCE can be due to delayed gastric emptying, intestinal dysmotility and/or capsule battery life. Prokinetic agents are used to increase completion rate (CR) and theoretically diagnostic yield. Domperidone, an antidopaminergic agent, has not been widely used in SBCE; [2,3] unlike Metoclopramide, it lacks extrapyramidal adverse effects.

Methods Retrospective study; to assess gastric transit time (GTT), small-bowel transit time (SBTT) and the CR of SBCE when using domperidone. Furthermore, we aimed to compare the CR of 2 different SBCE systems (MiroCam®,PillCam®). Consecutive SBCE examinations (period 2008–2012) from a tertiary referral centre in Scotland were analysed; domperidone was not administered to the first 203 patients, but was given orally to the subsequent 449, reflecting changes in clinical practise.

Results In the aforementioned period, a total of 652 SBCE examinations were performed [265 (40.6%) men and 387 (59.4%) women]; 385/652 (59%) were performed with PillCam® and 267 (41%) with Mirocam®. The most common indications for SBCE were obscure gastrointestinal bleeding, anaemia, Crohn's disease (known or suspected) and abdominal pain. In 449/652 (68.9%) liquid domperidone (5 mg) was administered for capsule ingestion, while in 203 (31.1%) the capsule was ingested without any domperidone.

In our series, the overall CR of SBCE was 86.7%. The 2 SBCE systems showed equivalent CR (PillCam® 87.5%, MiroCam® 85.4%; $P = 0.43$). The use of domperidone increased CR (88.6% ***vs*** 82.3%, $P = 0.027$). A higher CR was noted when domperidone was used with PillCam® in contrast to MiroCam® (82.2 ***vs*** 92.5%, $P = 0.002$ and 83.3 ***vs*** 85.5% respectively, $P = 0.8$). Furthermore, the median GTT and the median SBTT did not differ between the two groups (GTT/SBTT with Domperidone 27.0'/222.0' and without 30.5'/228.0', respectively; $P = 0.436/P = 0.477$).The median age of patients who received domperidone was higher compared with patients who did not receive (58y ***vs*** 48y, $P = 0.009$), although CR was not affected by the age (complete: 55y, incomplete: 61y, $P = 0.331$).

Conclusion The use of Domperidone increases the CR of SBCE with PillCam®, although it does not affect the GTT and SBTT and should be routinely used to improve CR in SBCE with PillCam®.

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Disclosure of Interest S. Dimitriadis: None Declared, A. Koulaouzidis Grant/Research Support from: Given Imaging Ltd, S. Douglas: None Declared, J. Plevris: None Declared

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PTU-023 THE USE OF PROKINETICS IN SMALL-BOWEL CAPSULE ENDOSCOPY: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Introduction Small-bowel capsule endoscopy (SBCE) is often limited by incomplete small-bowel transit. Although there are available meta-analysis data on the use of purgatives in SBCE, there is no similar data or consensus regarding the regular use of prokinetics for capsule ingestion. Our aim was to systematically review existing literature on the use of prokinetics in SBCE.

Methods Thorough and extensive, recursive search of PubMed/MEDLINE, Embase and Scopus databases for studies, published to the end of Nov 2012, was performed. No language, time or age limits were used. Abroad search strategy was employed, using the MeSH term "**capsule endoscopy**" connected with the following keywords by "AND": "**prokinetic**", "**promotility**", "**metoclopramide**", "**domperidone**", "**erythromycin**", "**antiemetic**", "**ondensetron**", "**completion**", "**gastric emptying**", "**transit**", "**ingestion**", "**preparation**", "**oral/liquid**", "**intramuscular**" & "**retention**". Additionally, the reference list of all the selected articles was manually checked for potentially suitable references that were not identified by the initial search. Studies were selected based on title and/or abstract. Eligible studies were included if the met **all** of the following criteria: (1)published as full articles of randomised control trials, (2) contained information on the type of the SBCE system used, (3)used prokinetics in (at least) one of the reported study arms/groups, (4) specified the type and dose of prokinetics used & (5)contained data on the rate of SBCE completion to caecum (CR). Data were extracted by the first author using a predifined Excel sheet. Primary end-point: the effect of prokinetics to SBCE CR.

Results A total of 13 studies (all prospective, randomised-controlled, single-centre; total of 1439 subjects) was selected for final review and analysis. In 11 of them, PillCam® (Given®Imaging Ltd) was used; 2 studies were performed with OMOM® (Chongqingjinshan Science & Tech Co, Ltd). 6 studies were designed to look at the value of metoclopramide vs control. In the remainder, other type of prokinetic factors (Erythromycin, Mosapride, Lubiprostone, Deikenchuto or chewing gum) was administered. Using random effects model analysis, the use of prokinetics seem to improve CR in SBCE (OR = 1.888, 95% C.I. = 1.178, 3.02; I^2 = 52.5%, P = 0.014). Moreover, in the sub-analysis for metoclopramide studies using fixed effect model, the results were similar (OR = 1.711 95% C.I. = 1.138, 2.573; I^2 = 42.3%, P = 0.123).

Conclusion Pooled data show that in comparison to no prokinetic, any type of administered prokinetic factor, before SBCE, improves the SBCE completion rate. Furthermore, most data to present are behind the use of Metoclopramide.

Disclosure of Interest None Declared

PTU-024 RELIABILITY OF ROCKALL SCORE CALCULATION AND ITS IMPACT ON GASTROSCOPY IN PATIENTS WITH ACUTE UPPER GASTROINTESTINAL BLEED (AUGIB)

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Introduction Documentation of Rockall score (RS) in patients with AUGIB should be accurate to prioritise patients for gastroscopy. We noticed that Rockall scores were being incorrectly calculated on electronic gastroscopy request forms and decided to analyse this further. We correlated RS with findings on gastroscopy

Methods Information was retrospectively collected on 100 patients who presented with AUGIB over a 2 month period between September and November 2012. Demographics, time to gastroscopy, Rockall score (RS) documented by requesting doctor, RS calculated by going through patient records (including A & E, paramedic entries) were recorded. We analysed patients whose RS was either under scored or over scored by the requesting doctor (as compared to the actual score as calculated by us) and correlated this with the electronic endoscopic records

Results 100 patients were included in the study with 60 males (60%) and 40 females (40%), age ranging from 17 to 92, (mean 65.2, median 69.5). Presenting symptoms were melaena in 57% of patients, haematemesis in 27%, coffee grounds vomiting in 12% and combined melaena and haematemesis in 4%. RS was calculated in 52% by Foundation Year 1 trainees (FY1), in 10% by FY2s, in 26% by Senior House officers (SHO), in 6% by Locum SHOs, in 5% by Registrars and in 1% by a consultant. 46 out of 100 Rockall scores were incorrectly scored. 28 patients (60.9%) were over scored, while 18(39.1%) were underscored

FY1s were responsible for incorrect scores in 27(58.7%) of patients, FY2 for 2 (4.3%), SHOs for 12(26%), locum SHOs for 3(6.5%) and registrars for 2(4.3%).

Mean time from electronic booking to endoscopy was days in patients Mean time to Gastroscopy was day in of under scored patients day in of over scored patients.

Of the 18 patients whose RS was under scored, 6 (33.3%) required endoscopic intervention with heater probe and Adrenalin injection. Of the 28 patients whose RS was over scored, only 3(10.7%) needed endoscopic intervention, while 5 of the 54 (9.2%) of the correctly scored patients needed endoscopic therapy.

Conclusion It is important to calculate the RS correctly at the time of first presentation rather than at the time when the admitting doctor sees the patient. Observations from A&E and ambulance records should be scrutinised to document the accurate RS thus helping endoscopy units to correctly prioritise patients for gastroscopy. Incorrect calculation of RS can have adverse impact on patient outcomes – under scored patients may be delayed while over scored patients may use up vital endoscopy slots.

Disclosure of Interest None Declared

PTU-025 DIAGNOSTIC YIELD OF A DEDICATED BARRETT'S SURVEILLANCE LIST USING TRIMODAL IMAGING

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Introduction A dedicated endoscopy list for Barrett's surveillance was introduced at our hospital from 2010. In this study we compared the rate of dysplasia detection and targeted biopsy of this approach with Barrett's surveillance on a general endoscopy list.

Methods In the dedicated list, all endoscopies were performed by a specific gastroenterologist who has an interest in Barrett's oesophagus using a combination of high resolution white light magnification,

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