obstruction, CE is a very useful diagnostic modality for small bowel Crohn's disease.

Competing interests None declared.

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PTU-143 | QUICKVIEW IN CAPSULE ENDOSCOPY: IS IT ENOUGH?

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Introduction Analysis of small-bowel capsule endoscopy (SBCE) is time consuming. QuickView (QV) has been added to the RAPID® software to reduce reading times. Its validity though has been questioned.[1] [2] We have recently showed that Blue Mode (BM) application provided image improvement for different lesion categories.[3]

Aim To assess the validity of QV with white light (QVWL) and QV with BM (QVBM) reading mode, in patients with obscure gastro-intestinal bleed (OGIB), compared with the standard (reference) viewing.

Methods Retrospective study; all SBCE for OGIB (August 2008—November 2011), performed with PillCam®SB, with complete small-bowel visualisation were included. A clinician with SBCE experience (>200), unaware of the capsule endoscopy reports, reviewed prospectively the SBCE video streams on RAPID® (ver. 7) platform using QVWL and QVBM. All SBCE were previously reported using standard viewing mode; these reports were taken as reference. Findings were labelled as P0 (non-pathological), P1 (low/intermediate) and P2 (high bleeding potential) lesions. Sensitivity, specificity, negative and positive predictive value (NPV and PPV) for QVWL and QVBM, as compared to reference review, for clinically significant (P1/P2) lesions was calculated.

Results A total of 106 SBCE were analysed. Indications were: overt OGIB in 21 and occult OGIB/IDA in 85. With QVWL, 54 [P0 (28), P1 (18), P2 (8)] lesions were detected; 63 [P0 (48), P1 (13), P2 (2)] with QVBM, as compared to 98 [P0 (67), P1 (23), P2 (8)] by standard (reference) reporting. For P1+P2 lesions, the sensitivity, specificity, PPV and NPV for QVWL (as compared to reference reporting) was 92.3, 96.3, 96 and 92.8%, respectively. For QVBM, the above values were 91, 96, 96.2 and 90.6%, respectively. The mean evaluation time (including reading and time to mark thumbnails) was 443 and 433 sec for QVWL and QVBM, respectively.

Conclusion When urgent SBCE analysis is necessary, for further immediate management planning, the QV mode can be trusted to provide an accurate (almost on-the-spot) diagnosis in most cases. In this setting, BM does not confer any additional advantage over WL. QV has high PPV (all P2 lesions were detected), but the NPV was just above 90% which indicated that QV can miss certain lesions (P1) thus necessitating further capsule review using the standard mode of SBCE.

Competing interests None declared.

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PTU-144 | SMALL-BOWEL CAPSULE ENDOSCOPY FOR IRON DEFICIENCY ANAEMIA ALONE; EXPERIENCE FROM A TERTIARY CENTRE

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Introduction Small-Bowel Capsule Endoscopy (SBCE) is a useful diagnostic modality in the investigation of Obscure Gastrointestinal Bleeding (OGIB). Its role though in Iron Deficiency Anaemia (IDA) is less clear.

Aim To assess the usefulness of SBCE in the diagnostic work-up of patients with IDA with neither complicating pathology nor specific GI symptomatology.

Methods Design: Retrospective study. Setting: University hospital & tertiary referral centre for capsule endoscopy for South East of Scotland. A review of SBCE database was carried out for the period between March 2005 and June 2011. Only patients with IDA and no other GI symptoms or known previous diagnosis contributing to IDA for example, Crohn's or coeliac disease were included in the analysis. Electronic and paper case notes were reviewed for information relating to procedure indications, investigations carried out prior to SBCE and subsequent findings. Cases with failed examinations due to SBCE retention and/or incomplete small-bowel transit were excluded from further analysis. SBCE findings were classified as clinically significant (small-bowel malignancy, significant inflammation and/or strictures and coeliac disease) or clinically relevant pathology that is, angioectasias (P1/P2 lesions).

Results A total of 811 SBCE examinations were performed during the above period. IDA as the sole indication for SBCE was recorded in 27% (n=221; 151F/70M, mean age: 62 yr) patients. All patients had bi-directional endoscopies prior to SBCE. The overall diagnostic yield (DY) of SBCE was 30.7% (68/221). The DY for significant pathology and angioectasias was 9% and 21.7%, respectively. In those ≤40 yr (n=20; 13F/7M, mean age: 26.5 yr), significant pathology was found in 25% (5/20); in the >40 yr group (n=201; 138F/63M, mean age: 72.2 yr), significant pathology was found in 7.5% (15/201), p=0.0231. Although none of the patients ≤40 yr had angioectasias, P1 or P2 lesions were found in 48/201 (21.7%) of those >40 yr, p=0.009. Age-range analysis showed angioectasias in 11.1%, 13%, 20% and 42% in the age-groups 41—50, 50—60, 60—70, 70—80 yr, respectively. Interestingly, in those >80 yr (n=16; 12F/4M, mean age: 82.5 yr) angioectasias were present in 50% of SBCE but no significant pathology was identified.

Conclusion IDA alone is one of the main indications (27%) for referral to the SBCE service of our centre with the majority of referrals coming from the >40 age group. In our cohort, the overall DY of SBCE for IDA is 30.7% and the commonest finding small-bowel angioectasias. The detection rate of significant small-bowel pathology for those >40 yr is low decreasing to zero in the >80 age group. In contrast, 25% of patients ≤40 yr had a significant or sinister diagnosis made with SBCE.

Competing interests None declared.

PTU-145 | A SYSTEMATIC REVIEW OF THE DIAGNOSTIC YIELD OF SMALL-BOWEL CAPSULE ENDOSCOPY IN PATIENTS WITH IRON DEFICIENCY ANAEMIA

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Introduction Although current guidelines recommend Small-Bowel Capsule Endoscopy (SBCE) for the evaluation of patients with obscure gastrointestinal bleeding (OGIB), its role in investigating patients with iron deficiency anaemia (IDA) alone is still unclear.

Aim To evaluate the diagnostic yield (DY) of SBCE in patients with IDA by means of a systematic review of studies reporting this data.

Methods A recursive literature search (sources: Medline and Embase) of studies reporting DY of SBCE in patients with IDA was undertaken (November 2011). The search was restricted to fully reported papers in English, published between January 2001 and November 2011, including adult patients and clearly reporting DY for IDA patients. Studies were selected and evaluated separately by two of the authors. Data on DY were extracted, pooled, and analysed. Any discrepancy in papers selection or in data extraction was solved by consensus. The QUADAS tool was used to assess the study for methodological quality. Statistical analysis was performed with STATA version 12.0.

Results A total of 27 (7 prospective, 20 retrospective; total of 1943 patients) studies was selected for final review and analysis. Five studies (including 316 patients) were specifically designed to evaluate only IDA patients; in the remaining 22 studies, the patients with IDA represented a subgroup of patients undergoing SBCE. Overall, the 27 studies were of poor to moderate quality. The overall pooled DY, estimated by applying the random effect model (I^2: 77.7%), was 48.2% (95% CI 43.1 to 53.4%) while it was 53.4% (95% CI 34.7 to 72.0%) and 47.2 % (95% CI 42.1 to 52.2%) for studies focusing and not focusing on IDA patients, respectively.

Conclusion Although the studies evaluating the DY of SBCE in IDA are of poor to moderate quality and heterogeneous, the estimated DY is about 50% and seems to be comparable with that observed in patients with OBIG.

Competing interests None declared.

PTU-146 | **DUAL ENERGY X-RAY ABSORPTIOMETRY (DEXA) SCANS IN COELIAC DISEASE (CD): ARE BSG GUIDELINES FOLLOWED?**

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Introduction Patients with CD have a higher incidence of osteopenia or osteoporosis due to reduced bone mineral density (BMD). However, significant improvement in BMD and calcium absorption is seen after introduction of gluten-free diet (GFD). The BSG recommend (with poor evidence) that DEXA scan should only be performed after introduction of GFD in patients with high risk (two or more of the following: age >70, low BMI, weight loss more than 10 kg and those with persistent symptoms on GFD for a year or non-compliance with diet). The aim of this study was to look at our practice of DEXA scanning in CD patients and assess whether BSG guidelines were followed and whether the timing of DEXA scans made any difference to outcome.

Methods We reviewed all 82 patients from our coeliac database who were diagnosed between April 1985 and November 2011 at a district general hospital in North London (Chase Farm Hospital). 14 patients were excluded from the study as medical notes were missing or they were lost to follow-up. Two patients did not have DEXA scan. Data were analysed retrospectively by review of medical and electronic records. Patient demographics, BMI, history of weight loss, age at diagnosis, date of DEXA scan and results were recorded. We used the standard WHO definition for osteoporosis (T score < −2.5), osteopenia (T score between −1 and −2.5) and normal (T score > −1).

Results The mean patient age was 54 (range 19–93) with 52 females. The mean time interval between diagnosis and DEXA was 2 years and 10 months (range 0 month–33 years) with a median of 8 months. 37 patients (56%) had DEXA scan within a year of diagnosis of which 16 (43%) were normal, and the rest had osteopenia (24%) or osteoporosis (32%). Of the remaining patients (45%), nine had normal DEXA, five had osteopenia and 11 had osteoporosis. Comparing these two groups of patients the timing of DEXA scan (1 year of diagnosis) was not statistically significant in terms of outcome (p value—1.0000). However 80% of patients over the age of 70 years had osteoporosis. There was no record of BMI, history of weight loss or other risk factors for osteoporosis prior to DEXA request.

Conclusion Our practice of DEXA scan did not adhere to the BSG guidelines. There was great variability in timing of DEXA scans in CD patients. There was marked absence of record keeping in terms of BMI, history of weight loss and other risk factors to guide DEXA requests. A large proportion of patients (80%) with CD over age of 70 had osteoporosis. The timing of the DEXA scan did not significantly affect the T score. The lack of adherence to guidance could be because of its poor evidence base and also there is no clear recommendation on repeat DEXA scanning following initial assessment. We would recommend clearer guidance on the assessment of osteoporosis in CD.

Competing interests None declared.

PTU-147 | **STRUCTURED GASTROENTEROLOGICAL EVALUATION AND IMPROVED OUTCOMES FOR PATIENTS WITH CHRONIC GASTROINTESTINAL SYMPTOMS FOLLOWING PELVIC RADIOTHERAPY**

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Introduction 17 000 patients are treated with radical pelvic radiotherapy per year in the UK. 50% will develop chronic gastrointestinal (GI) symptoms that adversely affect quality-of-life, which have been shown to persist at the same level of severity for at least 3 years following treatment. Despite this, fewer than 20% are referred to a gastroenterologist. We aimed to determine if structured gastroenterological evaluation improves symptoms this patient group.

Methods 60 patients with GI symptoms ≥6 months after radical pelvic radiotherapy were identified from oncology clinics. Those requiring urgent investigation via the 2-week wait pathway were excluded. They were assessed at baseline using patient-reported symptom-based questionnaires: inflammatory bowel disease questionnaire (IBDQ); Vaizey incontinence questionnaire (VIQ); and the Common Terminology Criteria for Adverse Events (CTCAE) pelvis questionnaire. Participants were then referred to and managed by gastroenterologists using an algorithmic approach, which involves the identification of all GI symptoms and investigation for all potential causes for these symptoms. Further assessments were made at 3 and 6 months using the questionnaires.

Results 20 men and 36 women were included, with a median age of 58.5 years (range 26.9–81.8). Median time from radiotherapy to baseline gastroenterological assessment was 3.0 years (range 0.6–18.7). Median IBDQ score improved from 168 at baseline to 195