

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

**Competing interests** None declared.

## REFERENCE

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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.<sup>1 2</sup> We have recently showed that Blue Mode (BM) application provided image improvement for different lesion categories.<sup>3</sup>

**Aim** To assess the validity of QV with white light (QVWL) and QV with BM (QVBM) reading mode, in patients with obscure gastrointestinal 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  $\leq 40$  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  $\leq 40$  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  $\leq 40$  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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