patients were of South Asian ethnicity, 40% British Caucasian and 12% Eastern European. The macroscopic descriptions of ileitis included erythema and oedema only (28%; n=7), the additional presence of <5 aphthous ulcers (60%; n=15) and >5 aphthous ulcers or larger ulcers (12%; n=3). All TI samples sent for AFB and TB culture were negative (n=18). 15 patients were subsequently diagnosed with histologically confirmed inflammatory bowel disease.

Conclusions We did not detect a positive TB culture in the study period. However, with those patients from TB endemic countries with negative TI TB cultures, we have noted improved confidence amongst the Gastroenterologists in diagnosing CD and initiating immunosuppression. Uncertainty often prompts rescoping of patients just to exclude TB with its obvious cost implications. In contrast a TB culture costs only £30 in our Trust. This study is ongoing and with further data we will be able to evaluate cost effectiveness.

REFERENCES

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PWE-098 IS METHANE TESTING A USEFUL ADJUNCT TO HYDROGEN BREATH TESTING?

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Introduction Hydrogen breath testing (BT) is a useful non-invasive test for diagnosing small intestinal bacterial overgrowth (SIBO) and carbohydrate maldigestion. In a proportion of patients methane is produced at the expense of hydrogen leading to false negative results. This retrospective study evaluated the diagnostic yield of methane testing in addition to hydrogen.

Methods Electronic records were interrogated for the results of all glucose and lactose BT performed for SIBO and lactose intolerance respectively between 22/05/2015 and 03/01/2018 using the GastroCH₄ECK[®] machine, Bedfont[®] Scientific Ltd.

Results During the study interval 569 patients (age range 16–86 y, 66% female) were referred for BT with glucose (48.5%) or lactose challenge (51.5%). Hydrogen and methane production was positive in 10.1% (71.4% female) and 4.7% (61.5% female) of patients undergoing glucose BT for SIBO. Two patients were hydrogen/methane co-producers. Hence 28.2% of patients with SIBO solely produced methane and would have been missed with only hydrogen assessment.

Hydrogen and methane production was positive in 25.6% (80.0% female) and 5.1% (68% female) of patients undergoing lactose BT for lactose malabsorption respectively. Two patients were hydrogen/methane co-producers. 14.8% of patients with positive lactose BT only produced methane and would have been missed with hydrogen mono-testing.

Overall 18.9% of all patients with a positive BT (n=24, 75% female) were sole methane-producers that would have been misdiagnosed if hydrogen mono-testing was conducted.

Conclusions In this study we have demonstrated that combined hydrogen/methane BT helps optimise diagnosis in patients with suspected SIBO or lactose intolerance. An extra 28.2% of positive breath tests for patients with SIBO and

14.8% for lactose malabsorption were identified with the addition of methane to hydrogen testing. Interestingly the proportion of patients producing methane was higher in SIBO than lactose malabsorption. Compared with the overall study population, a greater proportion of males tested positive for methane on glucose challenge. In comparison a greater proportion of females were methane positive on lactose BT. Currently only the minority of centres offer methane testing and our results suggest that a significant number of patients with possible SIBO or lactose malabsorption may be missed. Methane BT should be considered particularly for male patients with suspected SIBO.

PWE-099 PREMATURE DISSOLUTION OF THE AGILE PATENCY DEVICE

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Introduction Confirmed (visual) passage of an intact Agile (Medtronic Ltd) patency device (which contains a radiofrequency (RF) tag), absence of an RF signal or failure to identify the patency device on radiological imaging 30 hours post-ingestion predicts safe capsule endoscopy. [Hererrias et al., *Gastrointest Endosc* 2008] Premature dissolution of the device would give false reassurance that capsule endoscopy could be performed safely.

Methods Retrospective review of 2017 patency capsule database.

Results RF scan was performed on 490 patients 30 hours after swallowing an Agile patency device and, if an RF signal was present, patients went for a scout film and, where indicated, limited CT scan. Premature dissolution occurred in four cases (0.8%). All had normal colonoscopies and symptoms of Crohn's disease (two of whom had abnormal, one normal and one no prior small bowel imaging). In two, the scout films were reported normal, but a persistent RF signal prompted re-examination of the films and the identification of the RF tags. In the two later cases, the RF tag alone or with adjacent high density material (consistent with barium) was recognised as demonstrating premature dissolution.

Abstract PWE-099 Figure 1

Conclusions This is the first report of premature dissolution of the Agile patency device which occurred in about 1:100 cases. If the RF signal remains 30 hours post ingestion, care