and endoscopic investigations performed up to 5 years previously were reviewed. Episodes of negative investigations were considered 'missed' opportunities for diagnosis. Clinical outcomes were compared using chi-squared test and Kaplan-Meier survival curves.

Results 396 colorectal cancers were identified with 214 (54%) males and median age 72. Of these, 29 (7%) patients had undergone negative investigations including colonoscopy (n = 8), flexible sigmoidoscopy (n = 7), barium enema (n = 7) and CT for abdominal symptoms (n = 20) ('missed' group) within the previous 5 years, median 817 days prior to diagnosis. Age, mode of presentation, tumour site, pT and pN stage were comparable between groups. Metastases at presentation were more common in the 'missed' group (28% *vs.* 14%, p = 0.046) and survival at median follow-up of 416 days was significantly reduced (66% *vs.* 88%, p = 0.0004).

Conclusion A small proportion (7%) of patients with colorectal cancer has undergone previous negative abdominal or colonic investigation. Such episodes may represent missed opportunities for diagnosis and survival is significantly reduced in such patients. The recognition that endoscopic and radiological investigations may miss lesions should encourage repeat or alternative interval investigations where concerning symptoms exist.

Disclosure of Interest None Declared.

PTH-014 **TWO WEEK WAIT SYMPTOMS ARE PREVALENT IN BOWEL CANCER SCREENING PATIENTS WITH A POSITIVE FAECAL OCCULT BLOOD TEST BUT DO NOT PREDICT CANCER**

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Introduction Studies have reported a high prevalence of lower gastrointestinal (LGI) symptoms in bowel cancer screening (BCSP) patients. However, symptoms are often vague and without characterisation their significance is unclear. This study investigates the prevalence and characteristics of lower gastrointestinal symptoms in screening patients and aims to determine the relevance of two week wait (2ww) symptoms in this cohort.

Methods A prospective cohort study was performed. BCSP patients presenting for colonoscopy over a 7-month period were included. Data on symptom prevalence, frequency and duration was collected and assessed against 2-week wait criteria. Associations between symptom prevalence and outcome were investigated using the two-tailed χ^2 test.

Results Symptom and outcome data was collected in 397 patients. LGI symptoms were reported by 282 (71%) patients and 37 patients (9%) were found to have colorectal cancer (CRC). Symptom prevalence was comparable between those with or without CRC (65% *vs.*72%, p = 0.473). Meanwhile, 2ww symptoms were reported in 148 (37%) of all patients. 2ww symptom prevalence was comparable in those with and without cancer (38% *vs.* 39%, p = 0.915).

Conclusion This study demonstrates that while 2ww symptoms are highly prevalent in a FOB positive cohort, they do not predict a finding of colorectal cancer. These findings suggest that 2ww symptoms could not be used to prioritise investigation in this cohort while in those patients referred with 2ww symptoms, additional FOB testing would offer little predictive utility. Further efforts to increase public awareness of cancer symptoms are required, whilst false reassurance from a negative result should be discouraged.

Disclosure of Interest None Declared.

PTH-015 **PROSPECTIVE COMPARISON OF FICE AND I-SCAN FOR IN-VIVO CHARACTERISATION OF SMALL COLONIC POLYPS**

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Introduction In-vivo characterisation of small colonic polyps has been reported using several technologies but with few prospective comparisons between them. We aimed to compare the accuracy of Flexible Spectral Imaging Colour Enhancement (FICE) and i-Scan in the assessment of polyps < 10mm. In addition the relationship between accuracy of white light assessment (WL) and resolution of endoscope was assessed.

Methods Patients undergoing screening colonoscopy through the UK BCSP were prospectively recruited. All procedures were performed by a single endoscopist with extensive experience in in-vivo diagnosis. For the FICE group Fujinon 410,000 pixel CCD and 650,000 pixel CCD colonoscopes were used with an EPX 4400 processor. For the i-Scan group Pentax 1.2 Megapixel colonoscopes were used with an EPKi processor. All polyps < 10mm were assessed sequentially using white light endoscopy (WL) and either FICE or i-Scan before resection. Predicted histology was recorded with both modalities and compared to the final histopathological diagnosis. In-vivo characterisation accuracy was analysed based on the resolution of the endoscopes used; standard definition - SD (410K pixel), high definition – HD (650K pixel) and HD+ (1.2M pixel).

Results In the FICE group 293 polyps of mean size 4.7mm were assessed in 170 patients. In the i-Scan group 209 polyps of mean size 4.3mm were assessed in 84 patients. There was no significant difference in WL accuracy between SD and HD endoscopes (70% vs 72.7%, p = 0.606), however accuracy was significantly higher with the HD+ 1.2megapixel CCD endoscopes (93.3%) compared to both the SD (70.0%, p = 0.0001) and HD (72.7%, p = 0.0001) endoscopes. Sensitivity was significantly greater with FICE using an HD endoscope compared to an SD endoscope (92.6% vs 83.3%, p = 0.048). Overall accuracy was significantly greater with HD+ i-Scan (94.7%) than SD FICE (82.7%, p = 0.0003) and HD FICE (88.8%, p = 0.0439). The use of FICE improved accuracy from 70.0% with WL to 82.7% (p = 0.014) and from 72.7% with WL to 88.8% (p < 0.001) for SD and HD endoscopes respectively. Only a minor gain over WL was seen with addition of iScan (93.3% to 94.7%, p = 0.68).

Abstract PTH-015 Table 1

	Sensitivity %	Specificity %	Accuracy %
SD WL	76.0	59.3	70.0
HD WL	75.8	66.7	72.7
HD+ WL	95.5	89.3	93.3
SD FICE	83.3	81.5	82.7
HD FICE	92.6	81.3	88.8
HD+ i-Scan	97.0	90.7	94.7

Conclusion

1. Only a small, non-significant gain in WL accuracy is seen between a 410K pixel SD endoscope and a 650K pixel HD endoscope. However diagnostic accuracy with WL improves significantly with a 1.2 megapixel endoscope.
2. FICE significantly improves accuracy when used with an SD or HD endoscope but the very high WL accuracy of a 1.2 megapixel endoscope allows no significant additional improvement with i-Scan.

Disclosure of Interest None Declared.

PTH-016 **DEFECATING SCINTIGRAPHIC PHOTOGRAPHY AT ST GEORGE'S HOSPITAL: REVIEW OF FINDINGS AND CORRELATION WITH PATIENT SYMPTOMS**

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