

Results In total 4022 people aged 55 years were invited and 1129 (28%) screened over the 3-month period. Screening uptake differed by method of invitation, with a simple approach being significantly more successful than one that was more interactive (32% vs 27%, $p=0.0015$). Uptake also decreased significantly with increasing deprivation. Adenomas were found in 111 (9.8%) of those screened. Cancer was found in two subjects. Over 95% of participants rated the procedure as “very” or “fairly” acceptable. Over 90% of respondents said they would participate in cancer screening in the future and a similar proportion would recommend doing so to others. 11 out of 31 practices offered an estimate of the time spent on activities relating to this pathfinder for FSIG screening, most giving a figure of <1%.

Conclusion In this pathfinder study, a simple invitation to FSIG achieved a greater uptake rate than a more complex, interactive method of invitation. Deprivation was associated with lower screening uptake. Further pilots of the flexible sigmoidoscopy screening programme should focus on strategies to increase response rate and to improve technical aspects of the procedure. Further evaluation should be incorporated into that development.

Competing interests None declared.

PWE-078 INCIDENCE AND MANAGEMENT OF MALIGNANT POLYPS IN THE NORTH ESSEX BOWEL CANCER SCREENING PROGRAMME

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Introduction The outcome of colonic cancer in the UK population has sensibly improved since the introduction of the Bowel Cancer Screening Programme (BCSP) in 2006. This is mainly due to early detection of the cancer in its early stages of which the malignant polyp (MP) is often a manifestation. In this study we reviewed the detection rates and management of malignant polyps and their outcomes in the population of north and mid Essex and compared it to national and international experience.

Methods 33 patients with malignant polyps were identified between the start of the North Essex screening programme (February 2009) and December 2010. Data were obtained using patient notes, endoscopy, radiology and histopathology reports. 31 patients were included in the study because data of two patients were not available.

Results Of the 31 polyps, the vast majority (94%) was located in the left colon. 19 (61%) were peduncolated. Polyps average size was 1.5 cm, 8 (26%) measured >2 cm and only 2 (6%) measured <1 cm. Haggitt and Kikuchi classifications were used to assess the depth of invasion. Patients were divided into low risk (LR) and high risk (HR) groups according to histologic criteria (depth of invasion, lymphovascular invasion, grade and excision margins >2 mm). 16 (52%) fell into the LR group, 15 (48%) were considered at high risk. 29 (94%) patients had staging CT, with an average waiting time of 3.5 weeks for patients at HR (range 2–13 weeks) and 6 weeks for patients at LR (range 2–24 weeks). Five patients were surgically treated within 10 weeks (4 HR, 1 LR). The remaining patients were followed-up with a repeat endoscopy, with a mean waiting time of 9 weeks for patients at HR (range 4–15 weeks) and 24 weeks for patients at LR (range 9–60 weeks). Residual tumour was identified on endoscopic follow-up in two patients at HR. Surgery was finally performed in 15 patients (48.5%), 13 HR, 2 LR. Lymph nodes (LNs) involvement was present in four patients (30%). Residual tumour was found in 5 (33%). Surgical complications occurred in two patients (13%) and consisted in one anastomotic leak and one bilateral pulmonary embolism. To date cancer recurrence has been found in 2 HR

patients (6.5%) who had evidence of LNs involvement (median follow-up of 16 months, range 8–28).

Conclusion CT scans and endoscopic follow-up timing varied greatly between patients, especially for those in the LR group. LNs involvement and recurrence rate (30%) was higher than described in London BCSP centres (9.8%) but still consistent with other published data.¹ Further research is needed to clarify the need for staging CT and timing of follow-up endoscopy in patients at LR.

Competing interests None declared.

REFERENCE

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PWE-079 CHARACTERISATION COLONIC POLYPS USING FICE WITHOUT OPTICAL MAGNIFICATION: A NEW CLASSIFICATION SYSTEM (N.A.C.)

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Introduction FICE is a novel method of electronic imaging on Fujinon endoscopes which enhances surface and vascular patterns. It can be used to predict histology of colonic polyps. However, there are no validated classification systems for using the technique without magnification. This study aims to validate a novel tool for this purpose.

Methods The optimum FICE setting was determined in a picture study. Digital photographs were taken of polyps with white light and all 10 FICE settings at 1026×770 resolution. They were reviewed by two endoscopists who scored each image for clarity of the mucosal and vascular patterns on a 3 point scale (0=poor, 3=excellent). A second library was examined to determine the criteria associated with hyperplastic polyps, adenomas and cancer. In each case the true histology was known. A prospective study was then performed to test the identified characteristics in vivo. Finally the criteria were used in a prospective study of polyps <10 mm in size within a screening population.

Abstract PWE-079 Table 1

	Hyperplastic		Adenomas		Cancers	
	Study 2	Study 3	Study 2	Study 3	Study 2	Study 3
WLI features (vascularity)						
Pale	83%	59%	22%	17%	0%	0%
Normal	0%	4%	0%	13%	0%	0%
Dark	17%	37%	78%	70%	100%	100%
FICE features (vascularity)						
Pale	80%	67%	6%	17%	0%	0%
Dark	20%	33%	94%	83%	0%	0%
Very dark	0%	0%	0%	0%	100%	100%
FICE features (vascular patterns)						
Absent vascular pattern	50%	48%	0%	13%	0%	0%
Faint vessels not following crypts	50%	35%	0%	1%	0%	0%
Regular pericryptal pattern	0%	17%	94%	86%	0%	0%
Dense, irregular pattern	0%	0%	0%	0%	100%	100%
FICE surface pattern						
No surface pattern	63%	37%	0%	0%	0%	0%
Large, non-compact crypt pattern	37%	39%	0%	9%	0%	0%
Small, compact, regular pattern	0%	17%	88%	88%	0%	0%
Disorganised, irregular pattern	0%	0%	0%	0%	100%	100%
Cannot assess	0%	7%	12%	3%	0%	0%

Results To determine the optimum FICE setting images of 30 polyps were examined. The Mean Score for the sum of all categories was 232 (SD=12) for assessor 1 and 242 (SD=29) for assessor 2. Setting 4 was superior, with a score 2 SDs above the mean for each assessor (256 and 322). There was no significant difference in scores for the other settings. To determine the N.A.C. criteria images of 67 polyps were examined. Vascularity with white light and FICE, and vascular and surface patterns with FICE were found to be predictive of the true histology. See Abstract PWE-079 table 1. These characteristics were assessed in vivo in 112 polyps <10 mm in size. The results were similar to those obtained in the picture study. The criteria were used as an in vivo diagnostic tool on 299 Polyps <10 mm. An accuracy of 87%, Sensitivity of 90%, and specificity of 81% was achieved.

Conclusion This study demonstrates the optimum FICE setting and structural elements of polyps which can be exploited in making an in vivo diagnosis using FICE without magnification, and that they can be applied in a screening population of polyps <10 mm in size.

Competing interests None declared.

PWE-080 IMPACT OF PROMOTING FAST-TRACK COLORECTAL SERVICES TO THE GENERAL PUBLIC

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Introduction Colorectal cancer is the third most common malignancy and the second highest cause of cancer death.¹ In early 2011 the East of England region was targeted by the Department of Health with a promotional campaign regarding the symptoms of bowel cancer. This advertising campaign increased the demand on the suspected colorectal cancer service in the months that followed. We examined the impact of the increase in referral numbers on the number of cancers and advanced adenomas detected.

Methods All patients who attended the nurse led fast-track suspected colorectal cancer clinic from 1 February to 31 August 2010 and 1 February to 31 August 2011 were identified. Each patient's electronic medical record was examined in detail, in particular for diagnosis of polyps and cancer. The results were statistically analysed using either a Fisher's exact test or Mann-Whitney U test as appropriate.

Results A total of 1517 patients attended the clinic during the time periods studied (Abstract PWE-080 table 1). 36.7% more patients were seen in 2011 compared with 2010 (876 vs 641). The groups were matched for age (p=0.49), however more males were seen in 2011 (p=0.028). A total of 143 cancers were detected, 115 (7.6%) of which were colorectal cancers. There was no significant increase in colorectal cancers diagnosed in 2011 compared to 2010 (61 vs 54, p=0.33) nor was there a statistically significant difference in Dukes'

Abstract PWE-080 Table 1 Demographics and results for fast-track referrals in 2010 and 2011

	2010	2011	p Value
Number of referrals	641	876	
Average age	68.97	68.36	0.49
M	261	407	0.028
F	380	469	
All cancers	68 (10.6%)	75 (8.6%)	0.18
Colorectal cancers	54 (8.4%)	61 (7.0%)	0.33
Other cancers	14 (2.2%)	14 (1.6%)	0.44
All polyps	199 (31.1%)	279 (31.9%)	0.78
Advanced adenomas	44	52	0.67

stage between the 2 time periods and no significant difference in the number of polyps or advanced adenomas detected in 2010 and 2011 (p=0.78 and p=0.61 respectively).

Conclusion The promotional campaign resulted in a 37% increase in referrals to the colorectal fast-track clinic between 2010 and 2011. There was no statistically significant difference in the proportion of cancer diagnoses, however an extra 235 referrals in 2011 yielded only seven extra colorectal cancer diagnoses. The campaign has been considered a success by the Department of Health and is due to roll out nationally in 2012.

Competing interests None declared.

REFERENCE

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PWE-081 SUSPECTING COLORECTAL CANCER: IS THE DIRECT TO TEST ENDOSCOPY SERVICE A VIABLE OPTION?

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Introduction The Direct to Test (DTT) system has recently been instigated to investigate suspected colorectal cancer. Patients are allocated a DTT endoscopy or an initial traditional outpatient appointment. The aim of this novel study was to detect the yield results of the DTT cohort compared to the outpatient (OPA) group, establish benefits and ascertain if this modern practice is acceptable to our patients.

Methods Data collated from a Two Week Rule (TWR) database at a single centre over a 6-month period. Endoscopy, radiology and histology yield results reviewed for DTT and OPA. Questionnaires sent to DTT patients regarding satisfaction with service. Hospital ethics committee approval was gained. Simple statistical methods applied.

Results 660 data sets reviewed; 335 DDT, 323 OPAs. The average age of those allocated DTT was 67.8 years, 10 years younger than the OPA group. Within the DTT cohort 5.7% had colorectal cancer (average age of 71.2 years). Majority were at an early stage in comparison to OPA cohort (Dukes A 10.5%, B 54.5%, C 18%, D 9% vs 5%, 20%, 30%, 45% respectively). The predominant symptom was rectal bleeding (52.6%). The main diagnosis for DTT was colonic polyps (21.2%). The average time to investigation 11.5 days, 16.6 days to histological diagnosis. 10.5% of OPA group had cancer but 3% were non-colorectal cancer; half were pancreatic cancer presenting with loose stools and weight loss. Cancer diagnosis was at a later stage, many inoperable. 47% diagnosed with CT as first line investigation. 85% were satisfied with the DTT.

Conclusion The DTT system is an effective efficient service for the younger cohort of patient with red flag symptoms of colorectal cancer. This service can accurately and rapidly diagnose colorectal cancers so that further management can be quickly initiated, meeting national TWR targets. Polyps, precursors to malignancy, the commonest aetiology, maybe treated effectively during investigation. This service could reduce the burden on lower GI outpatient clinics, offering financial benefits and cut down waiting times. In addition, this novel study demonstrates that DTT is highly acceptable to patients. Success depends on an accurate referral by primary care with good communication between GP, specialist care and the patient and it must be emphasised to primary care and to the patient that further investigations maybe warranted following normal endoscopy.

Competing interests None declared.