

**PWE-280** **FAECAL OCCULT BLOOD TESTING (FOBT) AND INTERVAL BOWEL CANCERS-RESULTS OF A MULTICENTRE STUDY**

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**Introduction** We aimed to assess the incidence and demographics of interval cancers (cancers diagnosed within 2 years of a negative FOBT screening) in the eligible population of the East Midlands region.

**Method** The National Bowel Cancer Audit Programme data from three centres (Queens Medical Centre, Nottingham; Royal Derby Hospital and Sherwood Forest Hospitals) for all colorectal cancers in the screening age group (60–74 years) over a 2-year period (August 2011–August 2013) were linked for their FOBT screening status (BCSP database/Eastern Hub). Three cancer groups were identified: interval cancers, screen detected (positive FOBT) and those in the non-uptake group (eligible patients who declined screening). Tumours at and distal to the splenic flexure were classed as left sided tumours. Dukes C and D tumours were classed as advanced tumours. All three centres were in incident rounds of screening.

**Results** Of the 521 colorectal cancers identified, 128 (25%) were interval cancers, 162 (31%) were screen detected and 231 (44%) were from the non-uptake group. Gender, ethnicity and Deprivation index were comparable between the three groups.

The mean age in the interval cancer group was greater (67 yrs) compared to the screen detected (66 yrs) ( $p = 0.005$ ). The interval cancer group had a higher incidence of right sided cancers (38% vs. 25% and 29%;  $X^2=6.59$ ;  $p = 0.033$ ) compared to the screen-detected and non-uptake groups. Cancers detected in the interval cancer group were of a more advanced stage (Dukes C/D) (70% vs. 34% and 54%;  $X^2=37.2$ ;  $p < 0.005$ ) in comparison to screen-detected and non-uptake groups. The one year mortality in the interval cancer group (16%) was higher than the non-uptake group (12%) and the screen detected group (3%) (16% vs 12% and 3%;  $X^2=13.8$ ;  $p < 0.005$ ).

**Conclusion** A quarter of colorectal cancers identified in our screening-eligible population were interval cancers. We highlight the probability that these cancers were ‘missed’ by the guaiac-based FOBT screening tests. The interval cancer group also had poorer outcomes when compared to the screen-detected group. We highlight the need for a test with a lower false negative rate for population based FOBT screening.

**Disclosure of interest** None Declared.

**PWE-281** **ARE PATIENTS WITH CANCERS ‘MISSED’ ON FAECAL OCCULT BLOOD (FOB) TESTING TRULY ASYMPTOMATIC? – A MULTICENTRE ANALYSIS**

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**Introduction** We aimed to identify the symptomatology of patients who develop interval cancers (cancers diagnosed within 2 years of a negative FOBT screening) in the eligible population of the East Midlands region.

**Method** Data from the National Bowel Cancer Audit Programme from three tertiary colorectal centres (Queens Medical Centre, Nottingham; Royal Derby Hospital and Sherwood Forest Hospitals II) in the FOB testing age group (60–74 years) over 2 years (August 2011 to August 2013) were analysed and linked to the regional FOB hub to identify patients who had developed colorectal cancer after a negative FOBT in the screening interval (2 years) status. Tumours from and distal to the splenic flexure were classed as left sided tumours. Dukes C/D tumours were classed as advanced tumours. All three centres were in incident rounds of screening.

**Results** The study covered a population of 2 million of which 200,000 were eligible for screening. 521 colorectal cancers were diagnosed in the above population (0.11%). Of these, 231 cancers (44%) were in patients who had declined screening, 162 (31%) were picked up following on from a positive FOBT and 128 (25%) were picked up in patients who had a negative FOBT. Of these 128 patients (M: F; 84:44), median age 67 years (SD:3.8) the commonest presenting symptoms for these patients were change in bowel habits in 50 (39%). Other presentations included bleeding per-rectum in 44 patients (34%), abdominal pain in 38 (30%) patients, anaemia in 36 (28%) patients, loss of weight in 14 (11%) patients, bowel obstruction in 13 (10%) patients, bowel perforation in 3 (2%) patients. Only two patients were truly asymptomatic from the bowel cancer with this being identified in one patient during surgery for an ovarian cyst and during a trauma laparotomy in the other patient. In the 28% patients who had anaemia the blood picture included a Hb (mean) of 10.3 gm; MCV of 82.4 and; MCH of 26.3. In 61% of anaemic patients, the cancer was located on the right side of the colon with an equal percentage being of advanced Duke’s stage. The median interval between the negative FOB test and the diagnosis of cancer in these patients was 15 months (range 0.5–24 months).

**Conclusion** Our findings suggest that the majority of patients with ‘missed’ interval cancers were symptomatic with ‘red flag symptoms’ in spite of the negative FOB test. We also raise the possibility of a natural bias of subjects volunteering for the FOB test in that some who opt for the test may not be ‘truly’ asymptomatic but may have bowel symptoms not yet discussed with their general practitioner. We highlight the need for improved awareness to reduce delays in symptomatic patients seeking medical advice against a background of a negative FOBT.

**Disclosure of interest** None Declared.

**PWE-282** **IMPLICATIONS OF A ‘FALSE NEGATIVE’ FAECAL OCCULT BLOOD TEST (FOBT) – RESULTS FROM A MULTICENTRE STUDY**

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**Introduction** We aimed to identify the implications of a false negative FOBT in the population tested.

**Method** Data from the National Bowel Cancer Audit Programme from three centres in the FOB age group (60–74 years) over 2 years (August 2011–2013) were linked for their FOBT screening status to the Eastern FOB hub. Comparisons were done primarily between two groups: the interval cancer group (cancers diagnosed between 2 yearly FOBT screening rounds) and the non-uptake group (patients who were offered but