only, 3 diverticulitis, 4 diverticular stricture/fibrosis, 3 ischaemia + diverticulosis, 24 colorectal cancer + diverticulosis, 3 Crohn's disease + diverticulosis, 1 prolapse + diverticulosis, 1 ovarian cancer + diverticulosis). 4 were excluded because no drug history was available. The age range in the complicated diverticulitis group was 26 to 89 years with a mean age of 62 years with a male to female ratio of 23:28. The age range in the uncomplicated group was 46 to 89 years with a mean age of 72 years with a male to female ratio of 6:9.

In the complicated diverticulitis disease group, 6 patients (12%) were on nicorandil therapy, compared to 0 in the other group, a significant difference (p = 0.019, Fisher's exact Test). The use of nicorandil was not stated on any of the pathology request forms. It was raised as a possible contributing factor in only one pathology report.

Conclusion We have shown that there is an association between nicorandil use and complicated diverticulitis. In addition, we have also demonstrated that nicorandil-associated perforation, fistulation and abscess formation in diverticular disease is under reported.

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Disclosure of Interest None Declared.

PWE-007 THE INCIDENCE OF VENOUS THROMBOEMBOLISM IN THE BOWEL CANCER SCREENING PROGRAMME

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Introduction The Department of Health has published guidance stating that the development of venous thromboembolism (VTE) within 90 days of a Hospital event is a notifiable condition.[1] We have previously identified an increased risk of VTE[2] in patients attending for endoscopic procedures although this was confined to those with predisposing factors including malignancy. This study examined the incidence of VTE in patients with positive faecal occult blood tests attending for bowel cancer screening colonoscopy.

Methods Patients who participated in the bowel cancer screening programme in East Kent (BCSP) over a four year period from May 2009 to the end of April 2013 were included. Data was gathered from the 'Exeter' electronic database and cross referenced to the electronic radiology reporting system (PACS), to identify those patients with a history of VTE prior to, or within 90 days of colonoscopy (by Doppler Ultrasound, VQ scanning or Computerised Tomography of the Pulmonary Arteries – CTPA), a diagnosis of colon cancer made at colonoscopy; whether patients had been admitted for their procedures or had undergone surgery after the diagnosis.

Results Over the 4 year study period, 2296 patients attended for colonoscopy (F: 912; M: 1384, mean age 65.5 years). 203 patients (8.8%) were diagnosed with colorectal cancer (CRC). There were 10 cases of VTE post colonoscopy (CRC : 8; normal result : 2). In the 8 cases diagnosed with CRC and VTE, only 2 were diagnosed within 90 days post procedure (F: 2; at 21 days – bilateral PE's and 49 days – bilateral DVT's). They had not undergone surgery. Of the 2 patients with a normal colonoscopy result and VTE, none were diagnosed within 90 days post procedure. None of the VTE patients had a previous history of thrombosis or had been admitted for bowel preparation.

Conclusion The incidence of VTE in patients attending for colonoscopy in the BCSP is low, even in those patients diagnosed to have colorectal cancer.

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PWE-008 A NOVEL SAMPLING DEVICE FOR COLLECTING MUCOCELLULAR MATERIAL FROM THE RECTUM

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Introduction Earlier detection of colorectal and other gastrointestinal malignancies is an urgent objective. Currently much effort is directed at the development of *in vitro* diagnostic tests that evaluate informative protein or DNA biomarkers in stool or blood samples. Stool samples are inconvenient to collect, require special handling facilities, and suffer from contamination that may interfere with molecular assays. Blood samples, while more convenient, may not be as informative early in the disease process. Several studies have shown that significant numbers of exfoliated cells and their products are retained in a muco-cellular layer overlying the colonic mucosa but distinct from the stool itself, and that this material flows toward the rectum, where it can be captured for analysis.

Methods Origin Sciences has developed a novel sampling device, which incorporates an inflatable nitrile membrane. Following insertion into the unprepared rectum via a standard proctoscope, the membrane is inflated to make contact with the rectal mucosa for 10 seconds. The membrane is then deflated and retracted into the device prior to removal from the patient. Upon retraction the material sampled from the rectal mucosa is retained on the inverted membrane, which acts as a receptacle for the addition of buffer to preserve the material for subsequent analysis.

Results The sampler has been tested in over 2000 patients and healthy volunteers, and has shown excellent patient acceptability. Tests and *in vitro* experiments with monolayers of cultured human cells indicate that the membrane captures intact cells, which are easily washed off the membrane for further investigation. Mucous-associated soluble material captured by the device is rich in protein and nucleic acids. Levels of soluble protein present in the buffer varied between 90 and 3000 µg/mL, with a mean of 710 µg/mL. As part of a programme to identify novel cancer biomarkers, Origin Sciences has detected informative auto-antibody isotypes IgA, IgG and IgM by ELISA. The same preparation is also rich in nucleic acids; DNA has been found in amounts ranging from 0.5 to 21.9 ug/mL. This DNA is suitable for amplification and sequencing, since we have been able to detect a number of genes by quantitative PCR.

Conclusion The sampling device represents a novel and minimally invasive means of capturing biomarker-rich material from the unprepared rectum. Since there is minimal contamination by