presence of upper GI symptoms; however, further work is needed to evaluate the prevalence of upper GI symptoms in this population.
Disclosure of Interest None Declared.

PTH-142 THE ROLE OF SEHCAT SCANNING IN PATIENTS WITH CHRONIC DIARRHOEA: RESULTS FROM A NEW SERVICE

doi:10.1136/gutjnl-2013-304907.629

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Introduction Chronic diarrhoea is a common reason for referral to gastroenterology departments and often multiple investigations are undertaken. Bile acid malabsorption is an under recognised cause of chronic diarrhoea and currently occupies a lower tier in the investigatory pathway. SeHCaT scanning has been available in our region for the last 2 years and therefore the aim of this study was to investigate the role that this test has in such patients.
Methods All patients referred for a SeHCaT scan were identified by searching by procedure in the Nuclear Medicine department. Patient demographics, indication, number of previous tests, surgical history and SeHCaT result were noted. The cut off for an abnormal test was < 15% retention at 7 days. Notes were reviewed to determine which patients had treatment and the response rate. In those with a negative result, the final diagnosis (if known) was recorded.
Results 122 patients (95 female, median age 50 years) had undergone a SeHCaT scan for investigation of chronic diarrhoea during the period January 2011 to July 2012. 61/122 (50%) patients had a SeHCaT retention < 15% with 30 having retention values < 5%, 19 between 5.1 – 10% and 12 between 10.1 – 15%. An abnormal SeHCaT scan was associated with previous bowel surgery (Odds ratio 14.2, 95% CI 1.8–113.1, p = 0.002) but not gender (odds ratio 2.0 95% CI 0.8–4.7, p = ns) or previous cholecystectomy (odds ratio 1.2 95% CI 0.5–2.7, p = ns). 45/53 (84.9%) patients were commenced on bile acid sequestrants (mainly cholestyramine) with a good response to treatment. 13 patients were intolerant of cholestyramine and switched to colesevalam of which 10 have so far had clinical improvement. Prior to SeHCat scanning patients had undergone a median of 2.5 other investigations (range 0 – 9). Final diagnosis was bile acid diarrhoea (n = 61), irritable bowel syndrome (n = 34), malabsorption (n = 3), Crohns disease (n = 2), coeliac disease (n = 1), diverticular disease (n = 1), small bowel bacterial overgrowth (n = 1) and still being investigated (n = 19).
Conclusion In patients with chronic diarrhoea, SeHCaT scanning has a high yield and is associated with good clinical response to treatment with cholestyramine. We did not find that previous cholecystectomy was a risk factor but confirm that bowel resection appears to be. Switching to colesevalam is effective when cholestyramine is not tolerated.
Disclosure of Interest None Declared.

PTH-143 CYTOSPONGE INSTEAD OF ENDOSCOPY IN SYMPTOMATIC PATIENTS: A FEASIBILITY STUDY

doi:10.1136/gutjnl-2013-304907.630

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Introduction The estimated annual incidence for oesophageal adenocarcinoma in individuals with Barrett's oesophagus is 0.2–0.5%[1]. However, endoscopic screening of individuals with risk factors for Barrett's oesophagus including chronic heartburn and reflux[2] are not part of current clinical recommendations. The cytosponge, a non-endoscopic immunocytological screening kit is undergoing a multicentre study and promises to alter our current practice[3]. The cytosponge is less invasive than gastroscopy and would reduce the burden on endoscopy units if screening is to be introduced. It has also been shown to detect other benign diseases such as helicobacter, oesophagitis and candidiasis[4] and therefore may be able to replace routine gastroscopy in symptomatic patients. The aim of this study was to examine the percentage of endoscopy referrals to St Marys hospital that could be alternatively investigated with a non-endoscopic sampling method such as the cytosponge to detect Barrett's oesophagus and/or exclude more serious pathology.
Methods All pending endoscopy requests were audited on a randomly selected day. Of these, gastroscopy referrals from GP practises and outpatient department were analysed. Patients who were suitable for the cytosponge were identified using the following criteria. Inclusion - Age 45 years and above, symptoms of dyspepsia and reflux; Exclusion - Previous diagnosis of Barrett's oesophagus, previous endoscopy in the last year, portal hypertension, patients on clopidogrel or warfarin, clotting disorders.
Results A total of 161 gastroscopy referral forms were analysed; 73% from outpatients and 27% from GP surgeries. 22% of referrals were for dyspepsia and 8% for reflux. 16% of referrals were suitable for cytosponge as defined by the inclusion and exclusion criteria.
Conclusion One in six referrals from GP surgeries and outpatients could be offered cytosponge instead of endoscopy for detection of Barrett's oesophagus. Cytosponge would reduce cost, enable rapid bedside testing and provide a non-invasive method for individuals reluctant to have an endoscopic procedure. It could also be extended to detect benign oesophageal pathology and therefore avoid secondary care referrals and waiting list pressures.
Disclosure of Interest None Declared.

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PTH-144 BOWEL SCREENING IN WELSH PRISONS

doi:10.1136/gutjnl-2013-304907.631

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Introduction The aim of the bowel screening programme in Wales is to reduce mortality from bowel cancer by 15% in the population invited for screening by 2020. Some groups of the population are difficult to reach, particularly if they are not registered with a General Practitioner (G.P.). Not all prisoners are registered with a G.P. and a task and finish group was established to develop strategies to identify and invite prisoners for screening.
Methods Contact was made with governors and health care staff at the five prisons in Wales and an education programme provided for prison staff. Data sharing agreements were developed and agreed for each prison. Protocols and care pathways were developed for screening prisoners comprising of a slightly modified service model to the standard bowel screening programme. A pilot was established in 2 prisons and the service model modified in response to issues.

It was agreed that contact with prisoners would be through health care staff. There are around 110 prisoners within the eligible age range in Welsh prisons and during the pilot prison healthcare staff notified BSW of eligible prisoners. Invitations and test kits were sent in batches to the prisoner via the medical centre where staff arranged for prisoners to be offered the opportunity to participate.

Test kits were returned individually and results issued to the health care staff who disseminated them to individual prisoners. Should a prisoner have a positive test result, arrangements will be made with prison healthcare staff for telephone assessment to be undertaken by a Specialist Screening Practitioner (SSP). Prior arrangement with the prison will ensure that the prisoner is brought to the medical centre to undergo this assessment.

Consideration has to be given to posting of bowel preparation medication and for prisoners who needed to undergo colonoscopy. Collaboration with prison staff was needed to ensure prisoners were given equal opportunity to participate in the programme without breaching prison security policies.

Results The pilot was established in two prisons and is currently being rolled out in another. Uptake has been encouraging and a complete data set for the pilot phase will be presented in June. To date all prisoners who participated have received negative results and the positive pathway has not yet been tested.

Challenges encountered included engagement of the healthcare teams within prisons due to staffing levels and varying viewpoints towards health care and the concept of informed choice and consent.

Conclusion By engaging and developing this service within Welsh prisons, BSW has extended its population based screening programme to a vulnerable group and are committed to formal evaluation and service improvement where necessary.

Disclosure of Interest None Declared.

PTH-145 INVESTIGATION OF PARTICIPANT RESPONSES AND IMPLICATIONS FOR UPTAKE FOLLOWING SPOILT TEST KITS IN THE WELSH BOWEL CANCER SCREENING PROGRAMME

doi:10.1136/gutjnl-2013-304907.632

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Introduction Participants return kits to the Bowel Screening Wales (BSW) laboratory for testing. It is not possible to test some kits and these are spoilt. The BSW Laboratory has seen an increase in spoilt rate from 1.8% in Sep 2011 to 3.2% in Sep 2012, most related to a change in laboratory procedure to reject samples because identifiers written on the test kit did not match details held on the BSW Information Management System.

BSW analysed the effect this change in policy may have had on response rates longer term within the programme in the context of a decreasing uptake rate (currently at 53%). This was based on the hypothesis that not all participants might complete a second test kit.

Methods Participants were recorded as final non responders if no test kit has been received within six months of the initial invitation. Participants with a spoilt result validated from Oct 2008 to May 2012 were included in the analysis.

Results During the time period 8400 test kits were spoilt by the laboratory, 78% returned the test kit that was sent with the spoilt result and 80% returned another test kit sent in the same invitation episode. 80% returned FOB (Faecal Occult Blood test) kits and 90% FIT (Faecal Immunochemical Test) kits sent following an equivocal FOB result. If participants did respond, it was usually received within 4 weeks (70%), with another 6% returning their kit within 4–8 weeks later and 4% sending in their kit more than two months later.

The helpline received numerous calls from participants who were disappointed to have had their kit spoilt because of identity reasons. This may have potentially resulted in a decrease in motivation on part of the participant.

For those participants who did not send another kit back during the same episode (20%), to date only half have been re-invited as part of their next routine recall allowing six months follow up. Of these participants re-invited in a new episode 74% have not responded, (74% for FOB kits and 67% for FIT kits).

Figures for spoilt FOB were similar for males and females, with younger participants less like to respond. Figures for FIT kits show men more likely to return their later kit (this may need to be interpreted with caution in view of the limited sample size in this group).

Conclusion 20% of participants who respond and have a spoilt test result do not respond to another kit issued in the same invitation episode. These participants appear less likely to attend screening during the next invitation episode, 26% responded (allowing six months follow up). With 5000 spoilt test results issued per annum, 260 participants may not take part in the programme again. We suggest that further studies may help towards directing efforts for increased uptake in this group.

Disclosure of Interest None Declared.

PTH-146 OPTIMISING THE SCREENING STRATEGY TO REDUCE INTERVAL CANCERS – INITIAL EXPERIENCE IN THE WELSH BOWEL SCREENING PROGRAMME

doi:10.1136/gutjnl-2013-304907.633

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Introduction Analysis of interval bowel cancer rates within two years of a negative screening test kit result demonstrates rates twice as high following an equivocal FOB (Faecal Occult Blood test) with a negative FIT (Faecal Immunochemical Test), compared to a negative FOB. This analysis looks at the time to bowel cancer diagnosis following a negative FIT result to see whether participants may benefit from being recalled earlier for bowel screening than the current two year strategy.

Methods In Wales, the routine recall interval is two years. A cohort of participants with negative results validated between Oct 2008 and August 2010 were reviewed, with two years follow up data. These records were compared with all screen detected and symptomatic bowel cancers diagnosed in the two year follow up time period. The time interval from the negative screening result to their diagnosis of bowel cancer was recorded.

Results In the analysis time period, 9000 participants were issued with a negative FIT screening test result, 22 went on to develop bowel cancer within the next 2 years (0.24%). This compared to 0.14% of participants who had a negative FOB and were returned to routine recall (almost significantly different).

Of the 22 participants with cancer diagnosed following a negative FIT screening test result, the mean time to diagnosis was 366 days (median 316 days). However this varied depending on gender and five year age group.

29% women had a bowel cancer diagnosed within 3 months of their negative test result, compared to 7% men. At 6 months 20% men had been diagnosed with cancer. Similarly with the younger age group, 18% of participants aged 60–64 years had a bowel cancer diagnosed within 3 months, compared to 9% of those aged 65 years and older.

Analysing the potential costs of a tailored approach towards these equivocal test results, the cost to the bowel screening programme in Wales per year would be around 5,000 invitation letters with test kits to be posted out earlier (rather than at the two year routine recall interval). These potentially have the ability to diagnose the expected 10 cancers that would occur in the following twelve months.

Conclusion Women and the younger age group (60–64 years) may benefit from an early repeat test either at three months or immediately following their negative FIT test result. Men and the older age group (65 years and above) may benefit from an early repeat test at six months. It is unclear whether these are false negatives or true interval cancers but these preliminary results would suggest that if validated in a larger cohort, a tailored approach to equivocal FOB tests may optimise yield and potentially reduce the incidence of interval cancers.

Disclosure of Interest None Declared.