performing a longitudinal experiment on 6 male and 6 female C57BL/6 mice which will result in VOM profiles for each mouse along the time course of 8 weeks of a mouse's life, also providing us with 'normal' inter- and intra-animal metabolite variation. Such data will allow calibration of future studies of colonic disease in humans through the induction of colonic disease in mice.

Disclosure of Interest None Declared.

PTH-026 PREDICTORS FOR ALL CAUSE MORTALITY FOLLOWING CLOSTRIDIUM DIFFICILE ASSOCIATED DIARRHOEA

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Introduction Severe *Clostridium difficile* associated diarrhoea (CDAD) is an important nosocomial infection, often resulting in severe morbidity or death. The rates of CDAD have increased significantly in the last 2 decades, but predictors of outcome are poorly understood.

Methods A retrospective cohort study was performed in patients with a diagnosis of CDAD hospitalised at Leeds Teaching Hospitals NHS Trust (LTHT) between January 2011 and December 2011. The data on these cases was collected from electronic patient records and medical notes. Data collected included general demographics, underlying medical conditions, Horn Index, Charlson co-morbidity score, clinical and laboratory data, and the medical treatment given. Death due to any cause either during that hospital stay or within 30 days of discharge from hospital was the primary outcome. Severe CDAD was defined according to the UK Health Protection Agency (HPA) guidelines as WCC > 15 X 10^9/L, or an acute rising serum creatinine (i.e. > 50% increase above baseline), or a temperature of > 38.5°C, or evidence of severe colitis (abdominal or radiological signs). Logistic Regression analysis was used to identify parameters associated with mortality. SPSS version 17 (IBM Corp, NY) was used to perform the statistical analysis.

Results There were 247 patients with a diagnosis of CDAD made in 2011 at LTHT of which 16 were wrongly coded, 5 were treated in the community, 12 had insufficient information in the notes and in 68 patients the medical notes could not be traced. A total of 170 episodes in 146 patients were finally analysed. There were 36 deaths in this group. Patients who were dead were older (mean age 78±12.9 vs 76.6±17.6). Independent predictors of mortality on multivariate analysis included age (OR 1.051, 95% CI 1.009–1.095), Charlson co-morbidity score of ≥3 (OR 3.036, 95% CI 1.209–7.622), Horn Index (Major or Extreme) (OR 4.725, 95% CI 1.818–12.283), Severe CDAD (OR 3.454, 95% CI 1.222–9.760) and in-appropriate treatment of severe CDAD with metronidazole as first line therapy (OR 4.642, 95% CI 1.213–19.193). Factors not found significant included gender, prior use of antibiotics, PPI use, opioid use, prior episodes of CDAD and treatment with vancomycin.

Conclusion Predictors of all-cause mortality in patients with CDAD include older age, Charlson score≥3, Horn index ≥3, severe CDAD as defined by the UK HPA and in-appropriate use of metronidazole in severe CDAD. Patients with severe CDAD should not be treated with Metronidazole as first line therapy. Further prospective validation of these results is needed in a multicenter setting.

Disclosure of Interest None Declared.

PTH-027 STOPPING PROTON PUMP INHIBITORS TO PREVENT CLOSTRIDIUM DIFFICILE: IS IT POSSIBLE AND DOES IT HELP?

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Introduction Hypochlorhydydria due to proton pump inhibitor (PPI) therapy is associated with increased susceptibility and propensity to relapse from infection due to *C difficile*. The Health Protection Agency guidance advises review of PPI use in patients with CDAD. We have done a retrospective audit of patients with CDAD examining PPI use and any benefit achieved by stopping the PPI.

Methods All patients with CDAD between 2010–12 were reviewed by infection control nurses and advised the attending doctors to stop any PPI therapy where a clear indication was not obvious. We have retrospectively audited patient's relevant baseline characteristics, clinical outcome, length of hospital stay and PPI prescription at hospital discharge. In addition we followed patients up for 90days post discharge recording PPI prescription and further CDAD.

Results 75 patients, 38 taking a PPI (mean age 77 stD) and 37 not taking a PPI (mean age 72 StD). No difference was seen for antibiotic use, co morbidity, immunosuppression, recent surgery, enteral feeding or dependency. At hospital discharge of those taking a PPI 12/38 (32%) had died. The PPI was stopped in 17/26 (65%), further CDAD occurred in 3 taking a PPI and 5 not. Of those not taking a PPI on hospital admission 16/37 (43%) died by hospital discharge and at 90days 4 developed further CDAD.

Conclusion It was possible to stop PPI prescription in 65% of patients presenting with CDAD. We found no evidence that CDAD was more severe in patients taking a PPI or that there was reduced recurrence of CDAD in patients who had stopped taking their PPI or had never taken it.

Disclosure of Interest None Declared.

PTH-028 IS FLEXIBLE SIGMOIDOSCOPY EVER ENOUGH? AN AUDIT OF THE RATES OF PROXIMAL DISEASE DURING COLONOSCOPY

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Introduction There is debate about appropriate initial endoscopic investigation of patients with symptoms suggestive of colorectal cancer. Thompson (2008) proposed that for patients without iron deficiency anaemia or abdominal mass; Flexible Sigmoidoscopy (FS) should be first line with further colonoscopy only if significant distal colonic disease was detected. A proximal cancer miss rate of 1:500 patients over 60 years and 1:3000 below this age was reported. It was argued that this approach would significantly reduce costs and burden on patients.

However Lieberman (2000) reported 2.7% of asymptomatic patients screened with colonoscopy had proximal neoplasms without distal disease.

We have applied the Thompson criteria to our unit's colonoscopy data to establish the rate of disease, both neoplastic and other, proximal to the splenic flexure which would have been missed by performing FS alone.

Methods All colonoscopies performed in our unit over 2 months were examined and those which met the Thompson criteria for FS were included. The procedure and pathology reports were reviewed and the number with proximal but without distal disease, and type of pathology was established. Adenoma with low grade dysplasia (LGD) was the minimum classification for neoplasm.

Results 342 colonoscopies were reviewed and 200 met the Thompson criteria for FS. 17 (8.5%) patients had proximal disease without distal disease, of which 9 (53%) were neoplastic and 8 (47%) had significant other disease (87.5% inflammatory). Of the 82 patients > 60 years, it was found that 10 (12.1%) had significant disease, of which 8 (80%) were neoplastic (6 tubular adenoma with LGD, 2 tubulovillous adenoma with LGD). Of the 118 < 60 years, 7 (5.9%) had significant disease (85% inflammatory) and 1 (15%) neoplastic.

Conclusion 4.5% of patients who would have had a FS using Thompson criteria were found to have a proximal neoplasm. This is

considerably higher than initially reported and more in keeping with data from colonoscopic bowel screening. When examined by age, nearly 1:10 patients over 60 years would have had a missed proximal neoplasm. This rate was 1:100 for those who were under 60 years. A considerable volume of proximal non-neoplastic disease, mainly inflammatory, would also be missed with FS examination (1:20 patients under 60 years). This study supports the use of colonoscopy for first line investigation of all patients with symptoms suggestive of colorectal cancer.

Disclosure of Interest None Declared.

REFERENCES

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PTH-029 BOWEL SCREENING WALES NETWORK MULTIDISCIPLINARY TEAM AND NATIONAL REFERRAL CENTRE – THE FIRST 100 CASES

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Introduction The Bowel Screening Wales (BSW) Network Multi Disciplinary Team (NMDT) and National Referral Centre (NRC) pilot was established in October 2011 to offer the opportunity for expert opinion and discussion of therapeutic options for participants with complex benign polyps detected on the Welsh bowel screening programme.

Methods Participants with lesions that satisfied the agreed criteria were referred to the NMDT for advice from the expert panel regarding management. Recommended outcomes included local endoscopic or surgical treatment or referral to the NRC for endoscopic or surgical treatment.

Between the 17th of October 2011 and the 20th August 2012 October 2012 100 cases from all over Wales were discussed at NMDT meetings by video conference. Referrals were received from all 6 Health Boards in Wales and 11 of the 14 Local Assessment Centres (LAC) during this time frame.

Referral data and NMDT decisions were prospectively stored on a shared drive and a comprehensive data set entered onto the BSW registry for complex polyps.

Results The first 100 cases discussed at NMDT meetings satisfied the following referral criteria:

- 21 lesions with difficult to access
- 17 lateral spreading tumours > 2cms
- 11 participants with polyps greater than 4cms
- 20 participants with polyps in the right colon > 2cms
- 7 participants with residual polyps
- 24 others

52 cases were referred back to Local Assessment Centres for treatment, and 48 to the NRC for treatment. Detailed data on procedure type and final outcome will be presented in June.

All cases referred to the NMDT for discussion were thought to be benign at the time of referral which was confirmed by initial biopsy. Final histology was found to be adenocarcinoma in 6 cases. Data analysis will continue and include recurrence rates at 3, 6 and 12 months, post procedure complication rates and final number of procedures undertaken per participant for each lesion removed.

Conclusion The BSW NMDT and NRC have facilitated equity of service for participants of the bowel screening programme in Wales with complex benign polyps. Referrals to surgery for benign disease have been reduced as a result. This process has also facilitated central referral for specialist endotherapy and surgical procedures.

Disclosure of Interest None Declared.

PTH-030 WITHDRAWN BY AUTHOR

PTH-031 POLYP SIZE, LOCATION AND RISK OF ADVANCED NEOPLASIA IN A BOWEL SCREENING POPULATION IN NORTH-EAST SCOTLAND

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Introduction Colonoscopic screening for colorectal cancer (CRC) reduces CRC-associated mortality; however, there is some evidence that this effect applies to mainly left-sided, rather than right-sided, CRC. It is postulated that this might be because polyps with advanced pathology are smaller in the right colon and therefore more easily missed (Gupta *et al Clin Gastroenterol Hepatol 2012; 10:1395–1401)*. Our aim was to evaluate the relationship between the size and location of polyps with advanced neoplasia in a population undergoing bowel screening in North-East Scotland.

Methods Analysis of prospectively collected data collected for all screening colonoscopies performed in NHS Grampian region between January 2009 and January 2011. Subjects who had complete colonoscopy were included in the study. Lesions in the rectum, sigmoid or descending colon were considered left sided and lesions proximal to the splenic flexure considered right sided. Advanced neoplastic lesions (ANLs) were defined as polyps with cancer, high grade dysplasia or tubulovillous histology. Lesion size was defined as ≥1cm or < 1 cm

Results Of the total 1415 subjects undergoing screening colonoscopy during the 2 year period, 1320 (93.3%) had a complete colonoscopy and were included in the analysis. Of these, 606 (45.9%) subjects had a total of 1366 polyps; of these, 213 (35%) subjects had ANLs. Median patient age was 64yrs, and 157 (74%) were males. ANLs were located in the left colon in 169 (79.3%) subjects, in the right colon in 31 (14.6%) of subjects, and in both sides in 13 (6.1%) subjects. There was no significant difference between the proportion of subjects with small ANLs (< 1 cm size) in the right colon (n = 3, 9.7%) compared to the left colon (n = 24, 14.2%; Fisher's exact test).

Conclusion In subjects undergoing bowel cancer screening in North-East Scotland, small ANLs were not more common in the right colon. Further studies are required to clarify the pathogenesis of right-sided colonic cancer.

Disclosure of Interest None Declared.

REFERENCE

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Endoscopy

PTH-032 FUNCTIONAL OUTCOMES AFTER ENDOSCOPIC SUBMUCOSAL DISSECTION OF LARGE RECTAL POLYPS

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Introduction Large rectal polyps can cause a variety of symptoms. Removal of these lesions results in symptom resolution but may also lead to symptoms of evacuatory dysfunction. In this study, we present the functional outcomes and patient satisfaction after endoscopic submucosal dissection (ESD) of rectal polyps greater than 40mm in size.