

with elevated serum amylase went on to notes review, of whom 36 (20 female, mean age 61) were determined to have clinical pancreatitis i.e. 1.3% of all patients undergoing ERCP. Of those with pancreatitis, 4 procedures had a complexity grading of Level 1, 27 of level 2, and 1 case of level 3. In 4 cases the endoscopist was unable to cannulate the CBD. None of the patients received prophylactic NSAIDs at the time of procedure. 3 patients required ITU admission and there were 2 deaths. In 14 cases of PEP (39%), risk factors were present that could be considered an indication for prophylactic stenting, i.e. 0.52% of all patients undergoing ERCP.

**Conclusion** 2699 ERCP procedures were performed, no prophylactic stents were placed, but pancreatitis occurred as a complication in only 1.3% of procedures. Fewer than half of these patients would have been considered candidates for pancreatic stenting if available. With such a low baseline rate of PEP, the introduction of pancreatic stents should be appropriately selective in high-risk patients only, and NSAIDs considered in all high-risk patients without contraindications.

#### REFERENCE

Freeman ML. *Gastroenterol Hepatol* 2012;8(9):618–20

**Disclosure of Interest** None Declared.

## Gastroenterology service: development, delivery, IT

### PTH-016 DIAGNOSIS AND MANAGEMENT OF SPONTANEOUS BACTERIAL PERITONITIS: IS THERE A NEED FOR AN URGENT UPDATE OF NATIONAL GUIDELINES?

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**Introduction** Spontaneous Bacterial Peritonitis (SBP) is a frequent and serious complication in cirrhotic patients with ascitis. Clinical guidelines have been published by the BSG, EASL and AASLD for the diagnosis and management of SBP. We carried out a survey of current practice in the diagnosis and management of SBP in the North West of England.

**Methods** Survey questionnaires were sent to the Hepatology leads of NHS hospital trusts in the North West of England.

**Results** 11 responses from a total of 18 hospitals are included in this analysis. Ascitic fluid total white cell count (WCC) is estimated in all hospitals but only 6 (54.5%) estimate neutrophil count in addition. However only 5 trusts out of these 6 base the diagnosis of SBP on neutrophil count  $> 250 /\text{mm}^3$  ( $0.25 \times 10^9 /\text{L}$ ) which is in line with the recommendations of the above guidelines. Remaining use WCC  $>250 /\text{mm}^3$  ( $0.25 \times 10^9 /\text{L}$ ) as the criteria to diagnose SBP. Bedside inoculation of ascitic fluid for culture and sensitivity is practiced in most hospitals (10 of 11, 90.9%). First line antibiotic regimes used are listed in Table 1.

All hospitals offer secondary prophylaxis, ciprofloxacin being the most commonly used (8/11, 72.7%). Septrin 960 mg o.d. is recommended in 2 hospitals (18.2%) and a choice of ciprofloxacin, septrin or rifaximin in another. The dose of ciprofloxacin used was also varied – 500 mgs o.d. in 6 hospitals (75%), 250 mgs o.d. in 1 (12.5%) and 250 mgs weekly in 1 hospital (12.5%).

Primary prophylaxis is offered in only 2 hospitals (18.2%) based on ascitic fluid albumin concentration of  $<20 \text{ g/L}$  in one or  $<10 \text{ g/L}$  in those patients awaiting orthotopic liver transplant with no prior history of clostridium difficile infection in the other hospital.

**Conclusion** There is wide variation in practice in hospitals in the North West of England despite national and international guidelines. Varied criteria are used to diagnose SBP with fewer hospitals using ascitic neutrophil count which may lead to over-diagnosis and over use of antibiotics. There is a trend towards using tazocin and augmentin as first line antibiotics in the management of SBP even though the evidence is currently unclear. This probably reflects the underlying fear of Clostridium difficile infection associated with the use of quinolones and cephalosporins. Septrin is sparsely used for secondary prophylaxis despite being the preferred antibiotic of choice in regional liver transplant centre. An update of national guidelines regarding management of SBP including primary prophylaxis is urgently required.

**Disclosure of Interest** None Declared.

### PTH-017 INVESTIGATIONS, CANCER DIAGNOSES AND COST: A PROSPECTIVE STUDY OF TWO WEEK RULE VERSUS NON-TWO WEEK RULE GASTROENTEROLOGY REFERRALS AT A DISTRICT GENERAL HOSPITAL

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**Introduction** In 2000, the UK government introduced the two-week rule (TWR) referral initiative. This was to ensure all patients with symptoms potentially indicating a diagnosis of cancer were seen by a relevant specialist within two weeks of referral by their GP. Since its initiation, very little data has indicated improved survival outcomes for patients diagnosed with cancer via this pathway.

**Methods** All patients referred to gastroenterology under Two Week Rule (TWR) and standard non-Two Week Rule (non-TWR) pathways were prospectively followed up for a 3 month period from date of referral. This was done covertly by the investigators to avoid influencing decision making by the clinic physicians. Data recorded included number of clinic visits, number and type of radiological/endoscopic investigations undertaken, end diagnosis and cancer diagnosis. Crude costs per patient were calculated using the hospital's unit costing database.

**Results** There were 52 TWR patients (mean age 72.5, male 48.1%) and 89 non-TWR patients (mean age 57.9 (p = 0.0001),

**Abstract PTH-016 Table 2** Recommended first line antibiotic for Treatment of SBP (number of hospitals, percentage)

	Tazocin	Augmentin	Ceftriaxone	Cefuroxime	Ciprofloxacin	No answer
Intravenous	5, 45.5%	2, 18.2%	2, 18.2%	2, 18.2%	0	0
Oral	0	4, 36.4%	0	0	3, 27.3%	4, 36.4%

Abstract PTH-017 Table 1

Reason for referral	Anaemia	Abdominal pain	Abnormal LFTs	Weight loss	Vomiting or Dysphagia	Abnormal tests or imaging	Change in bowel habit	PR bleeding
TWR (%)	17.3	9.3	3.8	19.2	26.9	7.7	7.7	7.7
Non-TWR (%)	6.7	33.7	10.1	0.0	15.7	14.6	14.6	4.5

male 36.0%). Reason for referral for TWR/non-TWR is shown in the table below:

76.9% of TWR patients had an endoscopic procedure compared to 62.9% of non TWR patients ( $p = 0.09$ ). A similar percentage of patients in both groups underwent radiological investigation (TWR: 53.85%, non-TWR: 50.56%). More TWR patients underwent second imaging than non-TWR (9.6% vs. 6.7). 7.7% of TWR patients and 3.4% of non TWR patients had an end diagnosis of cancer, although this difference did not reach statistical significance. The mean age of the cancer patients in the TWR and non-TWR group was 70.3 years and 66.3 years respectively (although 2 of these in the non-TWR were below 65). 23.1 and 19.1% of patients had no clear diagnosis at 3 months in the TWR and non-TWR respectively. The mean cost of investigations and follow-up was significantly higher in the TWR cohort (£754.1 vs £613.1,  $p = 0.04$ ).

**Conclusion** In our sample of patients, those referred under the TWR pathway underwent a higher burden of invasive investigation with no significant increase in cancer pick up, despite being significantly more costly. The current system possibly delays cancer diagnoses in younger patients, who are more likely to be filtered through the non-TWR pathway. Perhaps alternative referral pathways need to be considered in a bid to improve cancer diagnosis in high risk patients.

**Disclosure of Interest** None Declared.

#### PTH-018 INTRAVENOUS FERRIC CARBOXYMALTOS (FERINJECT) GIVEN TO PATIENTS POST ENDOSCOPY – SAFE AND COST EFFECTIVE

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**Introduction** Intravenous (IV) iron is established as an effective management for patients with iron deficiency anaemia (IDA) and is indicated in those with severe iron deficiency, malabsorption, intolerance to oral iron and/or those requiring rapid correction of IDA.<sup>1</sup>

The use of traditional agents iron dextran (CosmoFer) and iron sucrose (Venofer) are inexpensive in drug cost (£50–60), however they require test doses, slow intravenous infusions (4 h +) and the incidence of hypersensitivity reactions are high. This required a day case attendance which increased the overall cost of an infusion significantly.

Then introduction of Ferric Carboxymaltose (FCM) has changed the landscape. Whilst the drug cost is 4 times higher, infusions only take 15 min and are much better tolerated. Also a higher dose of 1 g can be given. This only requires a short hospital appointment and reduces the overall cost of an infusion to less than traditional agents.

The majority of patients with IDA undergo endoscopy for investigation +/- management. We trialled the use of IV FCM in patients whom it is indicated during the post-procedure observational time.

**Methods** Since January 2013, patients receiving IV FCM post endoscopy had their details recorded in a database.

**Results** - 15 patients underwent IV FCM infusion post endoscopy;

- 9 women / 6 men, age range 33–83, mean age 64/ median 70;
- Mean dose 940mg / median 935.7mg (12 patients received 1g IV);
- 13 patients received IV sedation during endoscopy;
- 6 had gastroscopy, 9 had colonoscopy;
- Indication (s): Intolerant to oral iron 8, severe IDA 9 (GAVE, CRC), malabsorption 1;
- Adverse events: 1 patient with bruising post IV cannula removal (not related to FCM).

**Conclusion** The safety and cost effectiveness of IV FCM has been established. This study shows that this is also the case for patients who receive IV FCM post endoscopy.

The benefits of this approach are significant. Patients are already observed post-endoscopy so giving a short IV infusion is appropriate and does not require extra staff. This is also very convenient for patients, reducing the number of attendances required in addition to the benefits of IV iron for anaemia. Giving IV FCM post endoscopy reduces the costs significantly when compared those of a separate appointment to a day case unit.

#### REFERENCE

- 1 Andrew F Goddard, Martin W James, Alistair S McIntyre, Brian B Scott, on behalf of the British Society of Gastroenterology. Guidelines for the Management of Iron Deficiency Anaemia. *Gut* 2011;60:1309–1316

**Disclosure of Interest** None Declared.

#### PTH-019 THE EFFECT OF THREE INTERVENTIONS ON COLONOSCOPY QUALITY OUTCOMES - AN EXEMPLAR FOR ENDOSCOPY UNITS

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**Introduction** Kettering General Hospital's endoscopy unit performs >1300 colonoscopies per annum (symptomatic, surveillance and bowel cancer screening).

During 2012, three interventions took place in the unit.

1. The vetting guidelines for requesting colonoscopy were updated to reflect BSG guidance for the management of iron deficiency anaemia and NICE guidelines for colorectal cancer. The aim was to reduce the number of inappropriate colonoscopies, especially in those patients not fit for colonoscopy.
2. The information leaflets sent to patients pre-colonoscopy had a prompt added to urge patients to take the full dose of 4 sachets of Klean Prep (polyethylene glycol) to improve the diagnostic quality and exclusion value.
3. Three colonoscopists who were not meeting key performance indicators stopped performing colonoscopy. This allowed the remaining operators to increase the number of colonoscopies they perform.