

**Results** The blood results of 440 patients were reviewed using the ICE (Integrated Clinical System). The median age was 67-years. Of the 440 patients, 310 had deranged LFTs, 86 had a normal liver profile, and 44 had no LFTs taken prior to ERCP. Of those with deranged LFTs, 2% had only a raised bilirubin, less than 6% had either only raised transaminases or both raised transaminases and bilirubin, 12% had only both raised alkaline phosphatase (ALP) and bilirubin, 15% had both raised ALP and transaminases, 22% had only raised ALP, and 43% had a trio of raised bilirubin, ALP, and transaminases. Only 11 patients had no coagulation profile taken before the procedure. Out of the remaining 429 patients, 15 were on warfarin, 2 had haemophilia, 1 was thrombocytopenic, and 1 had von Willebrand's disease. However, out of 440 patients only 2 had an INR greater than 1.5, 1 of them being on warfarin.

**Conclusion** These results suggest that routine measurement of coagulation profile is unnecessary. This would reduce time delays, decrease costs and avoid further tests in patients. We suggest that the current pre-ERCP investigation guidelines be reviewed.<sup>4</sup>

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**Disclosure of Interest** None Declared.

### PTH-014 PANCREATIC DUCT DILATATION SHOULD BE INVESTIGATED WITH ENDOSCOPIC ULTRASOUND IF COMPUTERISED TOMOGRAPHY FAILS TO IDENTIFY A LESION

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**Introduction** A dilated Pancreatic Duct (PD) may be associated with pancreatic disease, but this is infrequently investigated further if no lesion is found on Computerised Tomography (CT). There is limited data on the role of Endoscopic Ultrasound (EUS) with PD dilatation without a cause on CT, as the literature mostly describes the utility of EUS with apparent pancreatic lesions. We describe our experience of EUS in identification of causative lesions not apparent on CT.

**Methods** Sixty-one (61) cases were identified and retrospectively reviewed between 2007-2013 by searching the EUS database at a university teaching hospital. All had CT +/- MRCP findings of dilated PD (+/- Common Bile Duct (CBD) dilatation) and no pancreatic lesion (54 patients) or oedema/unable to exclude a lesion (7).

**Results** Mean patient age was 70 (41-90). Indications for CT included abdominal pain 16; abnormal Liver Function Tests (LFT) 14 (3 jaundiced); weight loss 9; other 14 (eg. staging CT for lung ca, CT colonography for diarrhoea etc). Mean PD diameter was 6 mm (3-25 mm) and 30 had CBD dilatation. CT showed normal pancreatic parenchyma in 46 (76%); prominent ampulla 5 (8%); pancreatic cyst 5 (8%); calcification 4 (6.5%); pseudocyst 1 (1.5%).

After EUS, 49 (80%) had PD dilatation confirmed, whilst 31 (51%) also had CBD dilatation. 38 (62%) failed to identify a cause and hence agreed with CT. Of the remaining 23 (38%) there was disparity between CT and EUS. An FNA biopsy was performed in 16 (26%) of cases. Findings included neoplasm 9 (15%); IPMN 4 (6.5%); biliary stone disease 3 (5%); chronic pancreatitis 3 (5%); pseudocyst 1 (1.5%); choledochal cyst 1 (1.5%); and pancreas divisum 1 (1.5%). Neoplastic disease included pancreas cancer 5; suspicious ampullary tumour 2; cholangiocarcinoma 1; and mucinous cystadenoma 1.

With particular reference to EUS, there was isolated PD dilatation in 27 cases (44% of total), and abnormalities detected in (59%) which included cancer or IPMN (15%). In PD and CBD dilatation 22 (36%); 6 cases were abnormal of which 4 (18%) had cancer (pancreas and ampulla). Without PD dilatation 12 (20%), pathology was found in 50% including cholangiocarcinoma (1), IPMN (1), CBD stones (3), chronic pancreatitis (1). Of 9 cancer patients, dilatation was seen in PD only (4); PD and CBD (4); normal PD or CBD (1).

**Conclusion** PD dilatation should be investigated further with EUS, even when CT shows no causative lesion. We identified a significant percentage of benign (21%) and malignant (15%) pathology with EUS. EUS offers the additional advantage of biopsy when there is diagnostic doubt. Normal LFTs and the absence of the 'double duct sign' are insufficient to exclude neoplastic disease and EUS will help identify these.

**Disclosure of Interest** None Declared.

### PTH-015 POST-ERCP PANCREATITIS IN SECONDARY CARE: CAN WE PREDICT WHO WOULD BENEFIT FROM A PROPHYLACTIC PANCREATIC STENT?

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**Introduction** Pancreatitis is a recognised complication of ERCP. Measures taken to reduce the incidence in high-risk patients include placement of prophylactic pancreatic stents and use of NSAIDs, but current practice varies widely. The frequency of post-ERCP pancreatitis (PEP) in unselected groups ranges from 1.3-6.7% in the largest reported series. Historically, prophylactic stents have not been used at our institution. This retrospective study was designed firstly to measure rates of PEP in our institution (a district general hospital), and secondly to identify those cases which may have benefitted from prophylactic pancreatic stenting.

**Methods** A retrospective database search identified all patients undergoing ERCP across our Trust over a 5-year period (April 2007 to July 2012). A linked search with a county-wide biochemistry database then identified all those patients who had subsequently developed an elevated serum amylase up to 7 days following ERCP. A consensus grading system was used to define PEP as: clinical pancreatitis (new/worsened abdominal pain), requiring or prolonging hospital admission by  $\geq 2$  days, with serum amylase over 3 times upper limit of normal  $>24$  h post procedure (300 units/l). Additional risk factors for post-ERCP pancreatitis were identified: previous PEP, Sphincter of Oddi dysfunction, repeated cannulation, injection of contrast into pancreatic duct, Sphincter of Oddi manometry, balloon dilatation, precut sphincterotomy, or pancreatic sphincterotomy.

**Results** 2699 patients underwent ERCP during the study period. 6 patients were excluded due to incomplete records. 57 patients

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

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## 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%