three times a year for EUS network meetings to audit outcomes and review practice standards.

In 3 of the 4 centres cytopathology staff are present in the endoscopy room to provide rapid on site evaluation and confirm adequate sample cellularity and give a preliminary diagnosis.

Methods Each centre prospectively audited the results of EUS guided biopsy of suspected malignant solid pancreatic lesions over a 6 month period from 1.7.13 to 31.12.13. From this data the true positive rate was calculated to determine if such networking produced results comparable to large volume single centres.

Results There was a regional sensitivity of 96%. The majority of lesions were adenocarcinoma but other results included: 1 lymphoma, 8 neuroendocrine tumours, 1 renal cell cancer metastasis. Conclusion A regional sensitivity of 96% is comparable with results from a single large volume UK EUS centre. This demonstrates that smaller volume centres working within a regional network can achieve similar standards to high volume centres.

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PTH-097 HOW COMMON IS PANCREATIC EXOCRINE INSUFFICIENCY IN SECONDARY CARE GASTROENTEROLOGY CLINICS? A DUAL CENTRE STUDY

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Introduction Post-mortem studies suggest that chronic pancreatitis is present in 6–12% of the population, yet the diagnosis of chronic pancreatitis is infrequent. We hypothesised that previously undetected pancreatic exocrine insufficiency is seen in unselected patients referred to secondary care gastroenterology clinics.

Methods A multicentre retrospective analysis of all gastroenterology patients tested for faecal elastase (FEL-1) between 2009–13 was performed. In Sheffield and Middlesbrough a FEL-1 $<\!200~\mu g/g$ was defined as abnormal. Demographics, indication, co-morbidities and response to enzyme supplementation were recorded. Additionally, the findings of abdominal imaging were recorded. Prevalence of low FEL-1 was compared between the two centres (Fishers exact test). Binary logistic regression was used to determine if comorbidities could predict pancreatic insufficiency.

Results 1887 patients (mean age 51.6, SD 16.91, 1144 females) were included. Sheffield's group contained 1350 patients (mean age 49.1, SD 16.37, 857 females), and Middlesbrough's 537 (mean age 57.9, SD 16.60, 287 female).

The most common indication to test FEL-1 was diarrhoea (n = 1252), followed by abdominal pain (n = 378) and weight loss (n = 125).

The overall prevalence of low FEL-1 was 11.4% (Sheffield 11.0% vs. Middlesbrough 22.9% p < 0.0001). 13.7% (n = 171/1252) of patients with diarrhoea as the predominant symptom had FEL-1 <200. Of those with abdominal pain and weight loss 12.4% (n = 47/378) and 27.2% (n = 35/125) had low FEL-1 respectively.

86.8% (n = 236) of patients with low FEL-1 had abdominal imaging, (MRI, CT or US). 50% of imaging was normal (n =

136), 33.1% (n = 90) demonstrated pancreatic pathology consistent with either chronic pancreatitis or malignancy.

Binary logistical regression showed FEL-1 <200 was strongly associated with excess alcohol intake, diabetes mellitus, intrinsic pancreatic disease (malignant or non-malignant) and HIV infection (p < 0.0001).

79% (n = 128) of patients treated with pancreatic enzyme supplementation subjectively reported benefit from therapy. 12.3% (n = 20) had no benefit and in 8.6% (n = 14) it was not possible to assess benefit from medical records.

Conclusion This is the largest study to report detection of exocrine pancreatic disease in unselected gastroenterology clinics. Exocrine pancreatic insufficiency is strongly associated with diabetes mellitus, intrinsic pancreatic disease, high alcohol intake and HIV. Creon provides symptomatic benefit for those with pancreatic insufficiency, but further work is needed to establish appropriate dosage of enzyme supplementation. Clinicians should have a low threshold for checking FEL-1.

Disclosure of Interest None Declared.

PTH-098 68GA-DOTATATE PET IN LOCALISING NEUROENDOCRINE TUMOURS – COULD THIS BE THE STATE OF THE ART DIAGNOSTIC TEST?

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Introduction 68Ga-DOTATATE PET is an established tool for localising primary tumour in metastatic neuroendocrine tumours (NETs) and in identifying NET metastases not seen on cross-sectional imaging. There is increasing evidence regarding its role in detecting occult primary sites in suspected NET.

We present our experience of patients with primary gastrinoma/insulinoma seen only on Ga-DOTATATE imaging.

Methods Patients reviewed in King's College Hospital between 2005–2011 were included. Ga-DOTATATE was performed if there was a high degree of clinical suspicion of NET with supportive biochemistry but negative imaging and endoscopy.

Results Patients with primary gastrinoma/insulinoma identified only with Ga-DOTATATE are presented below.

A 61 year-old male with dyspepsia and diarrhoea experienced multiple spontaneous jejunal perforations. Fasting gastrin and chromogranin A were elevated (>700 and 106 pmol/L respectively). Octreoscan showed a possible abnormal area in the pancreatic body not seen on CT, MRI, PET-FDG or EUS. DOTATATE revealed a soft tissue density in the pancreatic head. Post-Whipples histology confirmed NET tumour in peri-pancreatic lymph nodes.

A 64 year-old female presenting with an upper gastrointestinal bleed from extensive duodenal ulceration was found to have an elevated fasting gastrin level (>400 pmol/L) but a normal CT and Octreoscan. DOTATATE identified a focus within the gastrinoma triangle. Resection confirmed a 15 mm nodule of peripancreatic tumour with histological evidence of endocrine differentiation of low grade and proliferative rate.

A 77 year-old non-diabetic male with irritable bowel symptoms presented with spontaneous duodenal perforation and developed episodes of hypoglycaemia (glucose 0.2 mmol/l)

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