## BSG 2014 abstracts

examination improved yield to 100% without significantly lengthening the procedure duration.

### **REFERENCE**

1 Hewitt MJ et al. EUS-guided FNA for diagnosis of solid pancreatic neoplasms: a meta-analysis. Gastrointest Endosc 2012; 75(2):319–31

Disclosure of Interest None Declared.

# PTH-095 PORTAL HYPERTENSION DUE TO SPLANCHNIC VENOUS THROMBOSIS FOLLOWING OPEN OR SKUNK WIRE NECROSECTOMY OF ACUTE SEVERE PANCREATITIS

<sup>1</sup>EJ Britton\*, <sup>1</sup>S Mahoney, <sup>2</sup>J Garry, <sup>2</sup>C Halloran, <sup>1</sup>P Richardson. <sup>1</sup>Hepatology, Royal Liverpool University Hospital, Liverpool, UK; <sup>2</sup>Department of Pancreatic Surgery, Royal Liverpool University Hospital, Liverpool, UK

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Introduction Isolated splenic vein thrombosis (ISVT) is a well recognised complication of acute pancreatitis with incidences ranging widely but more recently in a large meta analysis reported as approximately 14% with a reported incidence of varices of 53% and a GI haemorrhage rate of 12.3%. There is however less available published data on the incidence and natural history of splanchnic vein thrombosis that occurs with severe necrotizing pancreatitis requiring percutaneous or open necrosectomy.

Our aim was to retrospectively review all patients who underwent minimal access retroperitoneal pancreatic necrosectomy (MARPN) at RLUH from 1998 to 2012 to assess the incidence, natural history and complications of splanchnic vein thrombosis. Methods Using a hospital held database we identified all patients who had undergone MARPN or open necrosectomy and had an electronic hospital record. We assessed patient characteristics the incidence of splanchnic vein thrombosis at presentation, at most

	Number	Percentage
Portal venous occlusion at most recent imaghing	90	62.07
3 vessel	10	6.90
2 vessel	18	12.41
1 vessel	62	42.76
Recanalisation	7	4.83
Developed occlusion since admission	6	11.1
Endoscopy in patients with vessel occlusion	31	34.44
Varices	12	38.71
UGIB	2	6.45

recent cross sectional imaging, complications of portal hypertension including incidence of varices and variceal haemorrhage.

Results We identified 191 patients who had undergone necrosectomy. 46 cases were excluded from the final analysis as imaging reports made no comment on the portal venous system. The mean age was 56.1 years with a mean apache score of 9 on admission. Overall 31.7% (n = 46) underwent open necrosectomy and 68.3% MARPN necrosectomy. The results are outlined in Table 1.

Conclusion The incidence of splanchnic venous thrombosis in pancreatitis requiring necrosectomy is much higher than previously reported cases series assessing ISVT in patients with acute pancreatitis. The true natural history remains splanchnic venous thrombosis related to pancreatitis remains unknown, however in our case series the recanalisation rate was low. However in severe necrotizing pancreatitis portal venous complications should be actively investigated and UGI endoscopy to examine for varices should be carried out such that prophylaxis against variceal haemorrhage can be used where appropriate.

Disclosure of Interest None Declared.

# PTH-096 THE SENSITIVITY OF EUS FNA OF SOLID PANCREATIC LESIONS, WORKING FROM A REGIONAL MDT AND WITHIN A REGIONAL NETWORK

<sup>1</sup>H Gordon\*, <sup>1</sup>D Lloyd, <sup>2</sup>A Higginson, <sup>3</sup>R McCrudden, <sup>4</sup>C Bent, <sup>5</sup>F Shek, <sup>2</sup>R Beable, <sup>6</sup>A Al-Badri, <sup>7</sup>B Green, <sup>7</sup>E Jaynes, <sup>8</sup>D Collins, <sup>2</sup>D Poller, <sup>5</sup>B Stacey. <sup>1</sup>Gastroenterology, Hampshire Hospitals Foundation Trust, Winchester, UK; <sup>2</sup>Radiology, Queen Alexandra Hospital, Portsmouth, UK; <sup>3</sup>Gastroenterology, Royal Bournemouth County Hospital, Bournemouth, UK; <sup>4</sup>Radiology, Royal Bournemouth County Hospital, Bournemouth, UK; <sup>5</sup>Gastroenterology, University Hospital Southampton, Southampton, UK; <sup>6</sup>Histopathology, University Hospital Southampton, Southampton, VK; <sup>8</sup>Histopathology, Royal Bournemouth County Hospital, Bournemouth, UK; <sup>8</sup>Histopathology, Royal Bournemouth County Hospital, Bournemouth, UK; <sup>8</sup>Histopathology, Royal Bournemouth, UK

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Introduction Endoscopic ultrasound (EUS) guided sampling of advanced malignant pancreatic lesions is increasingly being performed in order to confirm malignancy prior to chemotherapy and or treatment. Meta-analysis of 33 studies examining solid lesion EUS FNA tissue acquisition in 4984 patients showed a pooled sensitivity of 85%, increasing to 91% if suspicious atypia was included <sup>1</sup>. Higher sensitivities have been demonstrated in large volume single operator centres where sensitivities of 92–97% <sup>2,3</sup> have been reported.

The four Wessex EUS centres all work from a regional HPB MDT, where pancreatic cases are discussed and EUS procedures requested. Each centre has two EUS operators, performing between 148 and 214 cases per annum. Additionally the regional EUS endoscopists, pathologists and biomedical technicians meet

		Number malignancy confirmed	False negative		True negative	
	Number solid pancreatic masses sampled		for malignancy on clinical /radiological findings	Insufficient sample	for malignancy, on clinical	
					/radiological findings	Sensitivity
Centre 1	28	24	0	0	4	100%
Centre 2	14	14	0	0	0	100%
Centre 3	17	11	0	1	5	92%
Centre 4	18	15	2	0	1	88%
Total	77	64	2	1	10	96%

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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.

### **REFERENCES**

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

<sup>1</sup>J Campbell\*, <sup>1</sup>D Sanders, <sup>2</sup>S Lee, <sup>2</sup>H Taha, <sup>2</sup>A Ramadas, <sup>2</sup>J McGivern, <sup>1</sup>M Kurien, <sup>1</sup>R Sidhu, <sup>1</sup>J Leeds, <sup>1</sup>A Hopper, <sup>2</sup>D Joy. <sup>1</sup>Gastroenterology, Sheffield Teaching Hospitals, Sheffield, UK; <sup>2</sup>Gastroenterology, James Cook University Hospital, Middlesbrough, UK

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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 µg/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

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?

<sup>1</sup>J Wu\*, <sup>1</sup>J Ramage, <sup>2</sup>A Prachalias, <sup>3</sup>R Srirajaskanthan, <sup>4</sup>R Sherwood, <sup>5</sup>N Mulholland. <sup>1</sup>Department of Gastroenterology, Hampshire Hospitals Foundation Trust, Basingstoke, UK; <sup>2</sup>Department of Hepatobiliary Surgery, King's College Hospital, London, UK; <sup>3</sup>Department of Gastroenterology, King's College Hospital, London, UK; <sup>4</sup>Department of Clinical Biochemistry, King's College Hospital, London, UK; 5Department of Radiology, King's College Hospital, London, UK

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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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