Adequacy for the sample for lesions <10 mm was 77% (10/13) and for more than 10mm was 68% (104/153); those for lesions in the head was 70% (55/79) and for rest of the pancreas was 75% (59/79). Success rate for single, two, three and four passes made to obtain sample were 58%, 75%, 70% and 80% respectively. Accuracies for 19, 22 and 25-gauge needle sampling were 67%, 76% and 85% respectively.

Conclusion EUS-FNA has high accuracy in the evaluation of suspected pancreatic lesions regardless of its size, location of the lesion. It was useful also in confirming small pancreatic lesions that were <10 mm. 25-gauge needle produced best tissue yield out of all the types of the needles used for sampling.

Competing interests None declared.

PM0-109 IGG4 RELATED AUTOIMMUNE DISEASE—EXPERIENCE FROM NORTH EAST OF ENGLAND

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Introduction IgG4 related disease is now well recognised as a multisystem disease. This condition, originally discovered in Japan in 1995 is now being increasingly recognised in the Western World. Apart from diagnosis, treatment can also present as a challenge in a small group of patients. We report our experience from a tertiary referral hospital in North-East England.

Methods Data were obtained from retrospective case note review from 2005 to 2011. Only patients diagnosed with AIP and IgG4 disease based on accepted international criteria were included in the study.[1]

Results 16 patients were identified during this period. Mean age group was 64 years (Range 43—83 yrs). Male=15, Female=1. Abnormal LFTs were present in 62.5% of patients. Mean bilirubin was 97 mmols/l (range 4—354). Mean total IgG was 15.9 g/l (range 7.5—26.7). Mean IgG4 subclass levels was 6.4 g/l (Range 0.27—24.6). Pancreas was affected in 88% (15) and biliary abnormalities were seen in 62.5% (10) of the cases. Other organs noted to be involved were pericardium (1), retroperitoneum (2), gall bladder (2). Two patients had duodenal obstruction due to inflammation of the duodenum, stomach, peripancreatic area and the gall bladder bed. CT scan revealed enlarged head of pancreas (HOP) in nine patients (57%), extra-pancreatic mass in 4 (25%), extra hepatic bile duct involvement in 10 (62.5 %) and intrahepatic bile duct involvement in 9 (37.5%). 3 (18.75%) patients underwent ERCP and two had stenting of biliary strictures. EUS was performed in nine patients—showed enlarged HOP in 4 (44 %) and changes of chronic pancreatitis—4 (44 %). Nine patients (56%) had a raised serum IgG4. Diagnosis was made at surgery or by laparoscopic biopsy in 7 (44%) patients. Final diagnosis: Type I AIP in 15 patients (88%), Type II AIP in 1 (6%) and IgG4 cholangiopathy with no pancreatic involvement in 1 (6%). Other autoimmune diseases that were associated were Raynauds disease (1) and Sjogren's syndrome (1). Steroids were initiated in 12 (75%) patients (mean dose 37.5 mg). Disease relapsed in three patients (25%). Azathioprine was started on five patients. One patient was switched to 6MP due to side effects.

Conclusion Extrapancreatic disease, especially biliary structuring appears to be common. As this condition mimics malignancy, a combination of modalities were needed to arrive at a diagnosis. Relapse in not uncommon and a small group of patients will require additional immunosuppression for control of the disease.

Competing interests None declared.

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PM0-110 AN AUDIT OF PANCREATIC CANCER OUTCOMES IN THE DISTRICT GENERAL HOSPITAL SETTING: OUTCOMES APPEAR BETTER THAN NATIONAL AVERAGE

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Introduction Pancreatic cancer outcomes nationally demonstrate poor survival outcomes with 1 and 3-month survival rates of 73% and 47%. We performed an audit of our experience of our patients with pancreatic cancer in the setting of a district general hospital and compared our results with the national dataset.

Methods We carried out data search from our system with all patients with a new diagnosis over 16 months from June 2010 to October 2011. The information was correlated with case notes and relevant histology and radiology reports. The data were collected and entered on an Excel spreadsheet for analysis.

Results 21 new diagnoses with a mean age of 73, range from 56 to 95. The male to female ratio was 3:2. The most common presenting symptoms were jaundice and abdominal pain. The average duration of symptoms developing to being seen was approximately 70 days. Patients on average had a CT scan within 7 days of being seen in clinic. Range 1—29 days. The most common radiological diagnosis was head of the pancreas tumour; representing 52% of cases. 62% of patients had biliary obstruction of which 69% had an ERCP and 31% had PTC insertion of a stent. The stent was changed at least once in 38% of these patients. 14% of patients had duodenal obstruction. 19% of patients underwent Whipples procedure with 57% patients having chemotherapy. Gemcitabine/Cisplatin combination was most commonly used. 48% of patients had died with a mean of 154 days from when they were first seen. The range was 80—226 days. 75% of the patients who had Whipples procedure and post op chemotherapy had metastatic disease on CT on average 10 months later. Of those that are still alive, only one other than those that had the Whipples procedure had survived more than a year.

Conclusion Our data demonstrated that our outcomes were better than the national data set produced by the Pancreatic Cancer UK charity. The average 1-year survival is 16% and our figures show that 24% of our patients survived more than 1-year. Our cumulative survival at 1-month and three months was comparable to the national average (100% and 86% vs 74% and 47%), are patients have radiological diagnosis sooner and more of our patients go on to have surgery. Our survival data supports that as a district general hospital we are able to manage patients' pancreatic cancer effectively and safely with good outcomes.

Competing interests None declared.

PM0-111 SHOULD ALL PATIENTS WITH LOCALLY ADVANCED PANCREATIC CANCER BE OFFERED INTRAOPERATIVE ASSESSMENT?

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Introduction Surgery is the only potentially curative option in patients with pancreatic cancer. Hence it is extremely important that the diagnostic tests used to ascertain resectability is very reliable before this curative option is denied to this unfortunate group of patients. CT and Endoscopic Ultrasound (EUS) which are commonly used as part of pre operative staging was compared with intraoperative findings to assess diagnostic reliability in determining resectability in patients with pancreatic cancer.

Methods All patients diagnosed with pancreatic adenocarcinoma over a 2-year period who underwent trial dissection or resection after routine staging with CT and EUS were included in the study. CT and EUS images were retrospectively reviewed by two radiologists in a double blinded manner and the findings were compared with operative findings and final histology in those patients who underwent radical resection. Sensitivity, Specificity, Positive Predictive value (PPV), Negative predictive value and Accuracy were determined for assessing major vessel involvement which in most cases preclude radical resection.

Results 23 patients (M:F=13:10; mean age=68; range=56–78) underwent trial dissection or radical resection over a 2-year period. 13 were inoperable (nine inoperable due to locally advanced tumour, 1 inoperable due to liver mets, three both locally advanced and liver mets) and 10 underwent radical resection (three resected with cuff of portal vein (all R1), seven resected with six of them R1). Predictably EUS had superior sensitivity and accuracy over CT for both major vessel involvement (88% vs 53% & 87% vs 65%) and nodal involvement (43% vs 10% & 56% vs 30%). However CT was superior to EUS in excluding major vessel involvement (specificity = 100% vs 86%) and comparable to EUS in ruling out nodal disease (specificity = 100%). Importantly, three patients declared as having major vessel involvement by either of the modality underwent radical resection, two of them with PV resection. One patient who was staged as resectable with no vascular involvement was found to have major vessel involvement and underwent resection (R1).

Conclusion Though CT and EUS have important role in staging of patients with pancreatic cancer, a significant minority of patients will still be amenable to radical surgery and should be offered trial dissection with a view to radical surgery as surgery is the only realistic curative therapeutic option.

Competing interests None declared.

Basic science (liver)

PM0-112 IS PRIMARY BILIARY CIRRHOSIS A STEROID SENSITIVE AUTOIMMUNE DISEASE?

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Introduction Primary biliary cirrhosis (PBC) is a classic T cell mediated autoimmune disease: an autoantigen has been described and high levels of antigen specific liver infiltrating auto-reactive $CD4^+$ T cells found. However, unlike in other autoimmune conditions steroid therapy is not considered effective in PBC although there is existing evidence that it can improve histological and biochemical parameters.[1] We sought further evidence that PBC is a steroid sensitive disease by using two in vitro measures of steroid sensitivity.

Methods We have applied an in vitro dexamethasone (Dex) inhibition of lymphocyte proliferation assay (DILPA), which correlates well with clinical steroid sensitivity and outcome in ulcerative colitis[2] and alcoholic hepatitis,[3] to 20 patients with PBC diagnosed by liver biochemistry, antibodies and liver histology (when performed). The DILPA assesses peripheral blood mononuclear cell (PBMC) sensitivity to treatment with steroids in vitro. We also examined the role of $CD14^+$ monocytes, which produce pro-inflammatory cytokines to recruit T cells to the tissue of inflammation. PBMCs were isolated from peripheral blood by density gradient centrifugation over Ficoll. $CD14^+$ cells were obtained by positive microbead selection and cultured with 300 ng/ml lipopolysaccharide in the presence or absence of Dex 1×10^{-6}M for 24 h. Supernatants were then collected and interleukin (IL)-1β, IL-6 and TNFα were measured by cytokine bead array (BD biosciences) according to manufacturer's instructions. Suppression of cytokine production by Dex was calculated.

Results In 20 patients with PBC, just one individual demonstrated in vitro steroid resistance by DILPA, and peripheral lymphocytes were sensitive to steroids in all other study subjects. Suppression of lymphocyte proliferation by Dex was significantly greater in patients with PBC compared to 37 healthy volunteer controls (86% vs 76%, p=0.04). Furthermore, Dex induced a 40%–100% suppression of IL-1β, IL-6 and TNFα (mean 75%, 74% and 79%, respectively) in the supernatants of $CD14^+$ monocyte cultures. This suggests that both peripheral blood lymphocytes and monocytes in patients with PBC are steroid sensitive.

Conclusion Using a validated measure of lymphocyte steroid sensitivity and a further assessment of monocyte steroid sensitivity we have demonstrated that PBC is a steroid sensitive disease. Together with existing clinical studies of glucocorticoids in PBC[1] our in vitro evidence suggests that steroid treatment should not be dismissed outright as it may provide a useful option in selected patients with PBC.

Competing interests None declared.

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PM0-113 FN14 IS EXPRESSED ON CHOLANGIOCYTES AND PROMOTES BILIARY DUCTULAR REMODELLING VIA APOPTOSIS AND REACTIVE OXYGEN SPECIES AFTER INTERACTION WITH TWEAK

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Introduction The mortality from chronic liver disease in the UK has increased by 50%.[1] The prevalence of cholangiopathies, diseases of the bile ducts, has increased fourfold.[2] These include primary biliary cirrhosis, primary sclerosing cholangitis and allograft rejection after transplantation.[3 4] It is increasingly observed in livers donated for transplantation after cardiac death, a source of organs on which the NHS is becoming more reliant.[5 6] It is characterised by inflammation and destruction of intrahepatic bile ducts.[7] When sustained it may drive portal fibrosis to end-stage liver disease when the only therapeutic option for patients is liver transplantation.[8] The novel TNF superfamily member TNF-like weak inducer of apoptosis (TWEAK) and its cognate receptor FGF-inducible protein 14 (Fn14) are implicated in hepatic inflammation and remodelling.[9 10] TWEAK is mainly secreted as a soluble cytokine by myelomonocytic cells.[11] Fn14-TWEAK interaction in other systems promotes cell growth, apoptosis, autophagy and transdifferentiation via activation of TRAF and NF-kB pathways.[12]

Aim To demonstrate the expression of Fn14 and TWEAK on cholangiocytes and the functional significance of Fn14/TWEAK interaction on biliary ductular remodelling.

Methods Human liver samples were obtained with consent from the Queen Elizabeth Hospital liver transplant programme. Sections were stained for Fn14 and TWEAK using immunohistochemical techniques. Expression of Fn14 and TWEAK on cholangiocytes stimulated with TNF-α, IFN-γ and FGF was established quantitatively using flow cytometry. Cholangiocytes stimulated with FGF were exposed to TWEAK for 48 h. Apoptosis and reactive oxygen species production at this time point were determined by flow cytometry using annexin and dichlorofluorescein assays respectively.