

PMO-106 THE ROLE OF ENDOSCOPIC ULTRASOUND IN IDENTIFYING CHRONIC PANCREATITIS: A COMPARISON PATHOLOGICAL SPECIMENS

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Introduction Imaging diagnostic criteria for chronic pancreatitis (CP) have long been debated. Patients with CP frequently undergo Endoscopic Ultrasound (EUS) as part of their diagnostic pathway, but it is unclear if should it be used as an adjunct for diagnosis or to simply exclude more sinister pathology.

Aim To assess the effectiveness of EUS in diagnosis in patients with CP when comparing resection specimens as the gold standard.

Methods All patients who had undergone EUS within 1 year prior to pancreatic resection between 2008 and 2011 at the Royal Liverpool University Hospital were identified from a prospectively maintained database. Resection specimens were compared to EUS and fine needle aspiration (FNA) findings. Agreement was assessed using κ statistic and groups were compared using χ^2 .

Results In the cohort of 93 patients (42% male; median [IQR] age 60 [51–72]) that underwent pancreatic resection, 60 (65%) patients had a clinical suspicion of CP. In the resection specimens CP was determined in 47 (51%) cases; 29 of which had CP alone and 18 with associated neoplasia. EUS correctly reported CP in 28 (60%) patients; 15 alone & 13 with a mass or cyst. EUS falsely identified three as CP, and missed the diagnosis in 19 thus giving a sensitivity of 60% and specificity of 93% (positive predictive value 90%; negative predictive value 70%). Overall agreement EUS and resection histology was moderate (κ 0.53). In the 29 resection specimens where CP was the sole histological diagnosis, there was good agreement with EUS which identified this as the sole pathology in 18 (62%) cases (κ 0.62). However, in these cases, EUS reported CP in association with other pathology incorrectly in 11/29 (38%) of cases, querying neoplasia in 9/29 (31%). The sensitivities of radial EUS (50) & linear EUS with FNA (43) were similar (54% & 65%; $p=0.47$). FNA cytology only confirmed the diagnosis of CP in 2/11 (15%) where CP was the sole diagnosis, both of which were already been identified on sonography. The EUS detection of neoplasia in patients with CP was only 53% (9/17).

Conclusion Overall EUS only showed moderate agreement with histology in diagnosing CP, which improved when CP was the sole diagnosis. There was no difference between linear and radial EUS, and FNA did not enhance the diagnosis of CP. This study shows that in context of CP, the EUS diagnosis of a concurrent neoplasia remains to prove difficult. Further detailed evaluation between clinical course, histological and EUS findings may be helpful.

Competing interests None declared.

PMO-107 ROLE OF ERCP IN THE MANAGEMENT OF ACUTE GALLSTONE PANCREATITIS—A REVIEW OF CURRENT PRACTICE

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Introduction Cholecystectomy is the preferred definitive treatment to prevent further episodes of gallstone pancreatitis, if patients have clear bile ducts and are suitable for surgery. Endoscopic retrograde cholangio-pancreatography (ERCP) is utilised to either clear the biliary tree of gallstones prior to operation or as definitive treatment

in those deemed unsuitable for surgery. We aimed to determine how ERCP is being utilised, its effect on recurrent pancreatitis and readmission rates.

Methods A multi-centre retrospective review was performed of patients presenting with their first episode of gallstone pancreatitis between 2006 and 2008. All patients with confirmed biochemical diagnosis of pancreatitis plus a radiological diagnosis of gallstones were included. Data were collected on demographics, ERCP, operative management and readmissions. Groups were compared using χ^2 and medians using Mann–Whitney U.

Results 523 patients were identified (36% male, median age 63) in seven acute hospital trusts. 166 (32%) underwent ERCP with 20 (13%) having a failed procedure. 127 (77%) underwent sphincterotomy with the common bile duct being clear in 80% (133). 28 (17%) were performed within 72 h of admission and 105 (63%) were performed during the index admission. There was no effect on the timing of ERCP in the likelihood of the procedure failing to be completed (median time 10 vs 10.5 days). 364 patients underwent cholecystectomy with 29% undergoing ERCP prior to surgery. ERCP was performed as the definitive procedure in 58 patients; median age 80 years compared to 58 years in those undergoing cholecystectomy (p two patients died following successful ERCPs; one 87 year old of *Clostridium difficile* colitis and one 81 year old of pancreatitis. There was one episode of post ERCP pancreatitis, and one bleed that resolved spontaneously. An additional 5 patients developed a second episode of pancreatitis subsequent to their ERCP. Sphincterotomy had not been performed in three of these cases ($p=0.08$). ERCP with the index admission was the only significant factor to reduce recurrent pancreatitis rates (OR 0.092 (0.013–0.673); $p<0.01$) however it failed to reduce the risk of readmission (OR 0.704 (0.39–1.26); $P=0.24$), which was only achieved by cholecystectomy within the index admission (OR 0.06 (0.01–0.4700); $p<0.01$).

Conclusion ERCP is currently being used as definitive treatment for gallstone pancreatitis in selected elderly patients. In our series ERCP had an acceptable rate of morbidity associated with the procedure, and was shown to significantly reduce the rate of recurrent pancreatitis. However, overall readmission rates were not improved by ERCP, with this only being achieved by cholecystectomy during the index admission.

Competing interests None declared.

PMO-108 DIAGNOSIS OF PANCREATIC SOLID LESIONS WITH EUS AND FNA: A REPORT OF ACCURACY

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Introduction Endoscopic ultrasound-guided fine needle aspiration (EUS-FNA) is an accurate method for cytological confirmation of pancreatic lesions, but it is unclear whether its diagnostic accuracy is affected by its size, location, or size of needles used for biopsy. Our aim was to investigate the accuracy of EUS-FNA for suspected pancreatic lesions in relation to these factors, especially to the size of lesions, size of the needle used for biopsy and number of passes.

Methods In this tertiary referral centre, EUS-FNAs for 186 solid pancreatic lesions from 1 April 2010 to 31 March 2011 were evaluated retrospectively. Size of the lesion, site of the lesions were obtained as well as the information on size of the needle used to take biopsy and number of passes made and adequacy of the sample obtained.

Results 87 males and 85 females had 186 EUS FNA for solid pancreatic lesions. 71% (123/172) of them were aged between 51 and 80 years. 79 lesions were in the head of the pancreas alone. Information on adequacies for sampling was available for 149 procedures. Overall adequacy of EUS-FNA sampling was 76% (114/149).