



Abstract PMO-094 Figure 3 SULF2 knockdown inhibits cell growth.

Competing interests None declared.

Pancreas

PMO-095 LAPAROSCOPIC VS OPEN PANCREATICODUODENECTOMY: ONCOLOGICAL OUTCOMES USING LEEDS PATHOLOGY PROTOCOL (LEEPP)—A MATCHED-PAIR ANALYSIS

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Introduction Laparoscopic Pancreaticoduodenectomy (LPD) has recently been shown to be a technically safe procedure. Oncological safety of LPD is still a matter for debate. Currently, there is limited evidence for cancer outcomes following LPD, especially in comparison to Open Pancreaticoduodenectomy (OPD). The aim of this study is to compare the adequacy of cancer resection and outcome following LPD and OPD.

Methods Between November 2005 and April 2009, 12 LPD's (nine ampullary and three distal Common Bile Duct tumours) were carried out in a tertiary referral centre. A cohort of 12 patients who underwent OPD from November 2003 to February 2007 were matched for age, sex, site of tumour origin and tumour size. Histology was assessed using previously validated Leeds Pathology Protocol (LEEPP) (Ref). The primary aim was to evaluate margin involvement and mean number of lymph nodes excised. The secondary endpoints were complications, high-dependency unit (HDU) stay, length of hospital stay (LOS), recurrence and mortality rate. The median follow-up was 46.8 months for LPD and 56.0 months for OPD.

Results R0 resection was achieved in 9 LPD vs 8 OPD ($p=1.000$). The T staging T2, T3, T4 were 6, 4, 2 for LPD vs 6, 5, 1 for OPD respectively ($p=1.000$). The mean tumour size was 19.8 for LPD Vs 19.2 for OPD ($p=0.870$). The mean number of lymph node excised for LPD vs OPD (20.7 vs 18.5, $p=0.534$). Clavien grade I/II complications (5 vs 8), Clavien grade III/IV complications (2 vs 6) and pancreatic leak (2 vs 1) were statistically not significant (LPD vs OPD). The mean HDU stay was longer in OPD group (3.7 vs 1.4 days, $p<0.000$), but LOS was no different (14.9 vs 14.9 days, $p=1.000$). There were two recurrences each in LPD and OPD group ($p=1.000$). Overall mortality for LPD vs OPD (2 vs 6, $p=0.193$) and recurrence-related mortality (2 vs 2, $p=1.000$).

Conclusion Compared to open procedure, in patients with tumour size <2 cm, laparoscopic pancreaticoduodenectomy achieves similar rate of R0 resection, lymph node harvest and long-term recurrence. LPD patients have significantly shorter high-dependency stay and lesser post-operative complications. Though technically challenging, laparoscopic pancreaticoduodenectomy is safe and does not compromise oncological outcome for tumours <2 cm.

Competing interests None declared.

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PMO-096 LAPAROSCOPIC DISTAL PANCREATECTOMY—A TERTIARY REFERRAL CENTRE EXPERIENCE

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Introduction Laparoscopic distal pancreatectomy was first reported in 1996 and is increasingly employed to remove lesions from the body and tail of the pancreas. The technique has seen a slow progress due to a relatively low volume of caseload, the lack of standardisation in the management of the pancreatic stump and concerns about the ability to achieve negative surgical margins for benign or malignant pancreatic neoplasms.

Methods Data were collected by retrospective review of case notes and histopathological results. 20 patients underwent laparoscopic distal pancreatectomy from April 2009 to January 2012.

Results 20 patients were included in the study, 0.45:1 male: female ratio (nine males, 20 females), mean age 58.55 [range 25–83]. In most cases the indication for surgery was a cystic lesion in the tail of pancreas (45%). The spleen was preserved in 15 cases (75%). None of the patients in this series required conversion from laparoscopic to open surgery or blood transfusion. Four patients (20%) were transferred to HDU postoperatively for 1–5 days and the mean hospital stay was 8.5 days [range 3–23 days]. Four patients (20%) had postoperative complications: one had partial splenic infarction which was managed conservatively, one had fluid collection that was treated by percutaneous drainage, one had a pancreatic stump leak that settled conservatively and one had abscess which required surgical intervention. The latter had laparoscopic right hemicolectomy at the same time of his pancreatic resection. There was no indication of a pancreatic fistula at follow-up. Histology confirmed one chronic abscess, one congenital cyst, five cancers, six potentially malignant lesions and seven serous microcystic cystadenomas. All tumours were completely excised with clear resection margins.

Conclusion Laparoscopic resection is feasible and achieves adequate resection margins.

Competing interests None declared.

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PMO-097 SURGERY FOR PANCREATIC CANCER WITHOUT PREOPERATIVE BILIARY DRAINAGE: FICTION IN REALITY?

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Introduction A recent article published in the New England Journal of Medicine describes decreased complication rate in patients who have not had preoperative biliary drainage of their obstructive jaundice caused by their pancreatic mass. Unfortunately our perception is such that the reality of early surgery without a bridging stent hangs in the realms of fantasy. Our aims were to

analyse the outcome of patients diagnosed to have pancreatic cancer in clinical practice in North London.

Methods In this dual centre retrospective study, a years worth of pancreatic cancer diagnoses was compiled using the North London Cancer Network Multi-disciplinary team meeting data base. The patients records were then searched gathering information on their dates of diagnosis; referral to our hepatobiliary surgeons at a local tertiary referral centre; whether they had a pre-operative stent; the date of their surgery (if they survived long enough to have it) and they're ultimate outcome.

Results 68 patients within our sector received a diagnosis (histological/endoscopic/radiological) of pancreatic cancer over the course of 1 year (May 2010–May 2011). Of this cohort 20 (29.4%) were referred for surgical opinion. During the lag between diagnosis and surgical review, 9 (45%) patients received endoscopic biliary drainage and stent insertion (all were 1st pass). The total number to ultimately receive their Whipple's was 5 (25%). In four patients in whom surgery was felt to be an option, aggressive disease and complications leading to a lengthy in patient stay at the point of diagnosis meant that the physical condition of the patient had deteriorated to the point where they were no longer fit for surgery/inoperable. Only one patient proceeded straight to operation without prior stenting. Two patients had their operations privately. Unfortunately details of any post operative complications are not available.

Conclusion Our experiences of pancreatic cancer is that at the point of diagnosis most cancers were inoperable 48 of 68 (70%). Within our study period only 5 of 68 (7%) patients had surgery for pancreatic cancer. The majority of patients even when initially considered for surgery (75%) do not end up having a resection. When patients are referred with symptoms of obstructive jaundice, knowing that the majority will not undergo surgery and also knowing in clinical practice that it is difficult to get surgical resection within 10 days of diagnosis, the humane thing to do instinctively is to stent and achieve biliary drainage. Achieving biliary drainage helps in improving the patients symptom profile and additionally allows chemotherapeutic options in those whose jaundice resolves.

Competing interests None declared.

PMO-098 DIAGNOSTIC YIELD OF ERCP AND EUS FNA IN A TERTIARY PANCREATIC CANCER CENTRE

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Introduction Patients with suspected pancreatic malignancy on cross sectional imaging are often referred for endoscopic investigations with a view to obtaining a definitive histological diagnosis. We aimed to assess the diagnostic yield of brushings and biopsies taken at endoscopic retrograde cholangiopancreatography (ERCP) and endoscopic ultrasound with fine needle aspiration (EUS FNA) in patients with pancreatic malignancy proven by operative histology.

Methods A retrospective audit of 125 patients undergoing surgery for pancreatic malignancy at the Royal Liverpool University Hospital (RLUH) from January 2009 to December 2011 was carried out. Of these patients, 35 underwent investigation at RLUH and are included in this analysis, two of these required two investigations. Fifty patients had ERCP at an external Trust and 40 patients went straight to surgery without endoscopic intervention. Data were extracted from the pancreatic surgery database and electronic patient records for demographics and histology reports taken at the time of endoscopy and surgery.

Results Overall 123 patients had operative histology confirming pancreatic adenocarcinoma, two patients had neuroendocrine tumour (NET) of the pancreas. Of the 35 patients undergoing investigation at RLUH, 34 had pancreatic adenocarcinoma and one had NET of the pancreas. Fifteen of 29 (52%) patients had brushings confirmatory of malignancy at ERCP, 9 of 29 (31%) had no malignant cells seen on brushings at ERCP, 3 of 29 (10%) had equivocal results suggestive but not diagnostic of malignancy. Brush cytology was not obtained in two patients, one patient suffered a perforation at ERCP requiring emergency surgery and one patient had failed cannulation of the CBD. Five of eight patients had an EUS FNA confirmatory of malignancy, two of eight had no malignant cells seen and 1 had equivocal results. In our cohort the sensitivity of ERCP alone is 56% (95% CI 36% to 74%) the combined sensitivity for ERCP and EUS 57% (95% CI 40% to 73%).

Conclusion The sensitivity of brush cytology at ERCP for has previously been reported to be between 50% and 65%^{1–3} for pancreatic malignancies. This is comparable to our findings in this cohort of patients with proven pancreatic malignancy. Positive histology from ERCP to EUS FNA can be confirmatory of pancreatic malignancy, but caution should be used when interpreting negative histology results given the intermediate sensitivity of these investigations.

Competing interests None declared.

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PMO-099 A COMPARATIVE STUDY OF LAPAROSCOPIC VS OPEN DISTAL PANCREATECTOMY

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Introduction The laparoscopic approach to distal pancreatectomy for benign and malignant diseases appears to offer advantages and is replacing open surgery in some centres. However, well-designed studies comparing laparoscopic distal pancreatectomy (LDP) to open distal pancreatectomy (ODP) are limited. We present a single-institution study comparing the outcomes of LDP to ODP.

Methods The demographic details, clinical characteristics and outcomes of patients who underwent laparoscopic distal pancreatectomy were compared to those who had the surgery performed by open technique. The two approaches were compared on an intention-to-treat basis. Data shown represent medians.

Results Between 2002 and 2009, 32 patients (20 female) underwent 16 LDP and 16 ODP respectively. The laparoscopic and open groups were comparable for age (57 vs 63 years, $p=0.584$), sex distribution and tumour size (3.9 vs 4 cm, $p=0.939$). Both groups had a comparable number of malignant cases (56% vs 50%, $p=1.0$). Although LDP took longer to complete (287.5 vs 240 min, $p=0.061$), it was associated with significantly lower blood loss (300 vs 500 ml, $p=0.031$) but comparable perioperative transfusion rate ($p=0.471$). The laparoscopic approach was associated with a significantly higher spleen-preservation rate (overall: 50% vs 12.5%, $p=0.05$; benign pathology: 85.7% vs 25%, $p=1.0$). LDP patients had a significantly lower HDU stay (1 vs 4.5 days, $p<0.001$) and a significantly lower postoperative hospital stay (6.5 vs 13.5 days, $p=0.001$). There was no significant difference in the postoperative morbidity and the R0 resection margin status.