0525: AUGIS TRAINEE PRIZE WINNER: ANTIMICROBIAL PROPHYLAXIS PRIOR TO PANCREATICO-DUODENECTOMY
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Aim: At our unit, antimicrobial prophylaxis prior to pancreatoco-duodenectomy (PD) consists of tazocin/fluconazole in patients who had preop-erative biliary drainage (PBD), or co-amoxiclav in patients without PBD. The objective of this study was to determine the appropriateness of these regimens by analysis of intraoperative bile samples.
Methods: Retrospective analysis of 60 consecutive patients who underwent PD (May 2011 - April 2012). Data regarding intraoperative bile cultures/sensitivities were recorded.
Results: Intraoperative bile samples were available in 33/36 patients who underwent PBD, and were positive in 30 (91%); bacteria in 26 (single 13, multiple 13) and fungi in 18. Bile samples were available in 16/24 patients in the non-PBD group, of which 5 were positive (31%) for bacterial infec-tion (single in all cases). In the PBD group, bacterial sensitivities were co-amoxiclav 12/26, tazocin 20/26, meropenem+vancomycin 25/26 and ciprofloxacina+gentamicin+metronidazole 16/26. In the non-PBD group, sen-sitivities were co-amoxiclav 3/5, tazocin 5/5, meropenem+vancomycin 5/5 and ciprofloxacina+gentamicin+metronidazole 4/5. Surgical site infections occurred in 8% of the PBD group and 29% of the non-PBD group.
Conclusions: Anti-fungal prophylaxis is essential prior to pancreatoco-duodenectomy in patients who have undergone preoperative biliary drainage. Regular review of intraoperative bile cultures and tailoring of prophylactic antibiotic regimens is recommended.

0531: ROLE OF ENDOSCOPIC ULTRASOUND AND MULTIDIMENSIONAL COMPUTED TOMOGRAPHY IN PREDICTING NEED FOR MESENTERIC VEIN RESSECTION IN PANCREATICODUODENECTOMY SPECIMENS – A HISTOPATHOLOGICAL CORRELATION
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In locally advanced pancreatic cancer, portal vein resection has been shown to be a safe and feasible procedure that increases the number of patients who undergo curative resection with a survival benefit. A retrospective review of the prospectively maintained database of pancreatoduodenectomy operations performed at National Surgical Centre for Pancreatic Cancer over 36 months (2010-2012) was performed. We looked at the pre-operative prediction of the need for venous resection made at the time of multidisciplinary team evaluation of CT and EUS findings based on current NCCN ‘borderline resectable’ criteria for venous involvement.
Portal vein resection, with primary repair or reconstruction, was performed in 20 of 218 (9%) consecutive procedures. Diagnostic pre-operative 4-Phase CT-Pancreas had been performed in all cases where vein resection was performed while additional EUS was performed in 15/20 (75%). Combined preoperative imaging predicted the need for resection in 10 of 20 (50%) cases while CT alone predicted only 6/20 (30%). The R0 resection rate was 12/20 (60%) with 17/85 (81%) patients alive at follow-up. Despite advances in multi-planar imaging, preoperative radiological evaluation often underestimates the need for mesenteric vein resection.
All patients undergoing surgical resection for pancreatic cancer should be consented and assessed for suitability to undergo major venous resection and reconstruction.

0598: BASO – THE ASSOCIATION OF CANCER SURGERY PRIZE WINNER: DETERMINING COMPLETE CLINICAL RESPONSE OF RADIOLOGICALLY DISAPPEARING: COMPLETE LIVER METASTASES AFTER CHEMOTHERAPY AND HOW THEY SHOULD BE MANAGED
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Aim: To determine if radiologically disappearing liver metastases (DLMs) after chemotherapy correspond to a complete clinical response. The treatment of DLMs was also assessed to determine whether they should be resected or left insitu.
Methods: A retrospective review was carried out on 342 patients referred for surgical opinion between January 2001 and January 2012. Twenty-eight patients showed evidence of at least one metastasis disappearing radiologically after chemotherapy. 16 patients were subsequently eligible for review, median follow up of 27.6 months (range 5.2 – 113.9 months).
Results: 35 metastases were identified in 16 patients. Twenty-eight me-tastases disappeared on imaging, 10 patients had 15 DLMs left insitu and 6 patients had 13 DLMs resected. Complete clinical response was observed in 15 DLMs (53.6%) on follow up. Five showed no recurrence within one year in those left insitu (33.3%) and 10 showed complete pathological response after resection (76.9%). A significantly reduced recurrence free survival was observed in the insitu group, [6.3 vs 19.4 months (p<0.001)], but overall survival was not significantly different between the two groups (p=0.12).
Conclusion: DLMs radiologically do not necessarily confer a complete clinical response. They should be resected when possible but leaving them insitu can be warranted.

0826: IS NORMAL MACROSCOPIC APPEARANCE OF THE GALLBLADDER FOLLOWING CHOLECYSTECTOMY SUFFICIENT TO EXCLUDE MALIGNANCY?
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Aims: Occasionally, histological examination of the gallbladder following routine cholecystectomy reveals an incidental cancer. We aim to assess whether inspection of the gallbladder postoperatively, followed by histo-logical examination of macroscopically abnormal specimens only, could be a safe and cost-effective alternative to routine histological examination in every case.
Methods: Patients undergoing emergency or elective cholecystectomy between 1 May 2003 and 1 September 2010 were included. Pathology records were used to identify all gallbladder malignancies. Only gall-bladder cancers picked up incidentally following cholecystectomy were included. Pathology reports were reviewed to establish whether there was a macroscopic abnormality.
Results: 4776 patients were identified, including 532 emergencies. Overall median age was 54 years (range 14 – 95). Male:Female = 1:3. Of these, 13 (0.27%) were found to have cancer; these patents had a median age of 68 years (range 48-84). 42% of cancer cases were emergency admissions (5 patients, data incomplete for one case) compared with 11% of benign cases (527 patients) (P=0.0068). Of the cancer cases, 5 gallbladder specimens (38%) had no documented macroscopic abnormality.
Conclusions: Most cancers are suspected from macroscopic appearance but a small number are not, and these may be missed. Emergency cases and older patients are particularly at risk.

0846: PRE-OPERATIVE LIVER ENZYME PREDICTS SURVIVAL AND RECURRENCE AFTER LIVER RESECTION FOR HEPATOCELLULAR CARCINOMA ARISING FROM NON-CIRRHOTIC/NON-FIBROTIC LIVER: A EUROPEAN PERSPECTIVE
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Background: HCC is uncommon in western countries. This study evaluated outcomes and prognostic factors following hepatectomy for HCC arising in non-cirrhotic/non-fibrotic livers.
Methods: Over a 15-year period, patients undergoing hepatectomy for HCC were identified from prospectively maintained database. Patient demog-raphics, pre-operative biochemical and hematological factors, intra-and postoperative clinical details, and tumour pathology were analysed against overall (OS) and disease progression-free (PFS) survival.
Results: 57 patients underwent hepatectomy for non-cirrhotic/non-fibrotic HCC during study period. Median PFS was 22 months and me-dian OS was 37 months, with 3- and 5-year survival rates post-resection of 48% and 39% respectively. 42% developed recurrent disease. In uni-variate analysis, the liver enzyme ratio was a factor affecting both OS and PFS (p<0.002). There was a significant trend towards poorer OS (Log rank test, p=0.04) for patients with poorly differentiated tumours compared to well and moderately differentiated tumours. Using Cox proportional hazard model analysis, pre-operative liver enzyme ratio was an independent factor for both OS (HR=3.13, p<0.02) and PFS(HR=1.02, p=0.04) post-hepatectomy. Poorly differentiated tumour
was also a prognostic indicator for the OS (HR=2.48, p=0.035) in HCC after resection.

Conclusions: Liver function prior to surgery and poor tumour differentiation are prognostic factors for OS and PFS after resection.

**0871: LAPAROSCOPIC SUBTOTAL CHOLECYSTECTOMY WITHOUT CYSTIC DUCT LIGATION – AN ALTERNATIVE TO OPEN CONVERSION. A PROSPECTIVE STUDY**

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Introduction: Laparoscopic cholecystectomy is the gold standard in the treatment of symptomatic gallstones. The dissection of the calot’s triangle can be complicated by acute or chronic inflammation. Laparoscopic subtotal cholecystectomy can be an alternative to open conversion for these difficult cases.

Methods: Prospective study of laparoscopic subtotal cholecystectomies performed by a single surgeon in a teaching hospital from 2007 - 2011. Total 179 cholecystectomies were performed, 162 were laparoscopic, 6 were open conversions, 1 open and 10 laparoscopic subtotal. 104 were elective and 58 were emergency.

Results: Ten laparoscopic subtotal cholecystectomies without cystic duct ligation were performed. Median age was 65 years (range 52-84 years). Median duration of hospital stay was 7 days (range 7-40 days). 7 were emergency and 3 were elective. Operative findings included empyema in 4, chronic cholecystitis in 2, acute in 3 and perforated gall bladder in 1. All patients had an intra-abdominal drain placement. Bile leak occurred in two patients, one settled spontaneously in 8 days and the other was managed with an endoscopic retrograde cholangiopancreatography and stent. No other complications were reported.

Conclusion: Laparoscopic subtotal cholecystectomy is an alternative to open conversion in difficult cases. Bile leak can occur but can be easily managed.

**0983: ROUTINE COAGULATION SCREENING IS AN UNNECESSARY STEP IN PATIENTS WITHOUT EVIDENCE OF BIOCHEMICAL JAUNDICE PRIOR TO ERCP**

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Aims: UK guidelines recommend that patients undergoing endoscopic retrograde cholangio-pancreateography (ERCP) should undergo coagulation screening within 72 hours of the procedure. We hypothesised that coagulation is rarely deranged without biochemical jaundice, making coagulation screening unnecessary.

Methods: All ERCP procedures performed at our tertiary referral centre between June 2011 and September 2012 were analysed. Demographics, pre-procedure prothrombin time (PT), bilirubin levels, indications and procedures performed were recorded. 519 procedures were included, with 55 patients excluded due to incomplete records or anti-coagulation therapy.

Results: The cohort was divided into two groups: jaundiced (n=266) (elevated pre-procedure bilirubin) and non-jaundiced (n=253) (normal pre-procedure bilirubin). In the jaundiced group 6% had a significantly prolonged PT (international normalised ratio (INR) of >1.5). In the non-jaundiced group none had an INR of >1.5, 6% had a mildly raised PT (INR=1.1-1.5), with no bleeding complications. The PT between the jaundiced and non-jaundiced groups was significantly different (mean ± confidence interval; 12.9±0.05 vs. 11.1±0.14; p=0.001).

Conclusions: Our data suggests that patients with normal bilirubin levels pre-ERCP rarely have deranged coagulation. In patients with a negative bleeding history and normal liver function tests undergoing ERCP, we suggest that coagulation screening is unnecessary. Focused coagulation testing could represent an annual saving of over £370,000 nationally.

**1034: COMMON BILE DUCT – DOES SIZE MATTER?**

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Aims: To evaluate correlation between pre- and intraoperative common bile duct (CBD) measurements and incidence of CBD stones at the routine intraoperative cholangiogram (IOC).

Methods: Retrospective review of patients undergoing laparoscopic cholecystectomy with routine IOC at Wexham Park Hospital between Jan 2007-Jan 2010. CBD size at pre-operative imaging (US, CT and/or MRCP) and IOC were analysed alongside with incidence of CBD calculi.

Results: 78 patients underwent IOC. In 21 (Group 1), CBD size was measured preoperatively at 4–15mm (mean 8mm) whereas intraoperative CBD size ranged between 6-23mm (mean 11mm). CBD calculi were seen in 7 cases preoperatively. 1 patient whose CBD measured 6mm preoperatively had a 6mm stone present at IOC. 2 patients with CBD of 11mm and 14mm preoperatively had intraoperative CBD of 20 and 18mm respectively with no calculi. In 57 patients (Group 2), preoperative CBD was reported as normal on USS but the size was not specified. On IOC, CBD size was 3-14mm (mean 6.8mm) with abnormalities not detected on pre-operative USS in 4 cases (1 CBD stone, 1 stricture, no flow to duodenum in 2 cases).

Conclusions: There is poor correlation between CBD size measured pre- and intraoperatively. It is difficult to predict presence of CBD calculus at the time of operation based on pre-operative imaging.

**1214: TIMING OF CHOLECYSTECTOMY FOLLOWING ACUTE ADMISSION WITH CHOLELITHIASIS**

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Aims: There is increasing evidence supporting early over delayed cholecystectomy for acute cholelithiasis. This study aims to identify factors that could predict those who may benefit from early cholecystectomy.

Method: A retrospective review of a prospectively maintained database of emergency surgical admissions at a single centre was undertaken. Admissions for acute cholecystitis were identified over 6 months and followed-up for 6 months. Data on patient demographics, admission details, investigations, interventions and re-admissions were collected.

Results: 82 patients were identified (24(29.3%) male, median age 56(range 18-91)), 46(56.1%) patients had biliary colic, 33(40.2%) cholecystitis and 3(3.7%) cholangitis. 60(73%) patients had a cholecystectomy; 37(62%) on a separate planned admission, 20(33%) during index admission, 3(5%) at a subsequent emergency admission. No significant difference in post-operative complications was seen between the groups. 19(23%) patients were re-admitted with acute cholecystitis within 6 months. There were no re-admissions following cholecystectomy at index admission (p=0.004).

Multiple logistic regression demonstrated no statistically significant effects on the rate of in-patient cholecystectomy or re-admission when adjusted for age, gender, sepsis, deranged liver function tests, investigations or cholecystitis. (Chi square=0.0002; df=9; p=0.0743 and Chi square=0.0002; dfs=8; p=0.3715 respectively).

Conclusion: Early cholecystectomy for cholelithiasis is safe, effective and significantly reduces the rate of re-admission with biliary complaints.

**1219: RADIOFREQUENCY ABLATION FOR COLORECTAL LIVER METASTASES – A META-ANALYSIS**

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Aims: The aim of the meta-analysis is to evaluate the comparative therapeutic efficacy of radiofrequency ablation (RFA) and hepatic resection (HR) for solitary colorectal liver metastases (CLM) and test whether RFA is superior compared to HR when it comes to survival (overall and disease free) and recurrence.

Methods: All studies citing the MeSH terms, “ablation” and “colorectal liver metastasis” were identified by searching the Medline database between March 2006 and March 2012. The outcome measures were the HRs and 95% CIs for the disease free survival and overall survival as well as the follow up period.

Results: From the 8 eligible studies overall survival and disease free survival are in favor of HR and this is statistically significant (p-value = 0.0002 and <0.001 respectively). The risk of recurrence following RFA is 3.54 times greater compared to the one following hepatic resection.

Conclusions: Liver resection remains the best treatment option for solitary resectable CLM - it is associated with acceptable morbidity providing adequate patient selection. In contrast, RFA is associated with significant risk of local recurrence which generally translates into decreased survival compared to resection. Currently, RFA cannot be considered a valuable alternative to liver resection in case of resectable CLM.