

PTU-083 CAUDATE LOBE RESECTION FOR COLORECTAL LIVER METASTASES: A MATCHED PAIR ANALYSIS

doi:10.1136/gutjnl-2012-302514c.83

G Marangoni,* A Hakeem, R K Prasad, G J Toogood, J P A Lodge. *HPB and Transplant Unit, St James' Hospital, Leeds, UK*

Introduction Tumours located in the caudate lobe can be challenging due to the anatomical relation of segment I with the inferior vena cava (IVC), the presence of multiple small caudate veins, variable bile ducts anatomy and difficult exposure during surgery. Some groups reported increased morbidity, smaller resection margins and inferior outcomes. Aim of the study was to compare the group of patients who underwent caudate lobe resection (CLR) with a group of patients without caudate lobe excision (NCLR).

Methods Over a 16-year period, from November 1994 to November 2010, 1295 consecutive liver resections for colorectal liver metastases were performed at our Institution. The cohort of caudate resection patients were age (± 1 year), sex and number of resected segments matched with an exact number of other hepatic resection patients that did not include the caudate lobe. Seventy-five patients had CLR. Six patients who had isolated CLR were excluded leaving 69 cases from analysis.

Results ASA score, comorbidity, number of bilateral resections, steatosis and fibrosis did not differ among the cohorts ($p=NS$). Similarly the number of tumours, size of the largest tumour and resection margins (R0 vs R1) did not differ among the two groups ($p=NS$). Post-operative stay (13.5 vs 10.9 days), ICU admissions (16 vs 7), morbidity (sepsis, bile leak, cardio-vascular, respiratory; 26 vs 27), number of patients transfused (7 vs 5), hepatic failure (7 vs 6) and 60-days mortality (1 vs 2) were not significant (CLR vs NCLR, $p=NS$). Overall survival at 1, 3 and 5 years were 85%, 57% and 48% for CLR and 95%, 61% and 50% for NCLR respectively. Disease-free survival at 1, 3, and 5 years were 75%, 47% and 47% for CLR and 85%, 63% and 53% respectively.

Conclusion Although caudate lobe involvement adds to the technical complexity of hepatic resection, it does not appear to carry increased morbidity and mortality when associated to major liver surgery. The rate of R0 resection and overall and disease-free survival does not differ between CLR and NCLR.

Competing interests None declared.

PTU-084 INCIDENTAL GALLBLADDER CANCER AFTER LAPAROSCOPIC CHOLECYSTECTOMY: TREATMENT AND SURVEILLANCE POLICIES IN THE UK: RESULT OF A SURVEY

doi:10.1136/gutjnl-2012-302514c.84

G Marangoni,* A Hakeem, G J Toogood, J P A Lodge, R K Prasad. *HPB and Transplant Unit, St James' Hospital, Leeds, UK*

Introduction Increasingly diagnosis of early gallbladder cancer (GBC) is incidentally made after laparoscopic cholecystectomy (LC). T stage correlates with nodal metastases and potential for residual disease. Although there is no controversy in the treatment of T1a and T2 tumours, there is still no agreement on what constitutes optimal management for pT1b and the extent of lymphadenectomy for pT2 tumours. Staging, timing of surgery after LC and treatment of the extrahepatic biliary tree are not standardised.

Methods The aim of this study was to assess the treatment, staging and surveillance protocols of incidentally found GBC after LC among hepatobiliary and upper GI surgeons in the UK in the light of the current published literature. A questionnaire on incidental GBC was devised and sent to the Consultant Surgeons members of the

Association of Upper GI Surgeons of Great Britain and Ireland after approval from the Association of Upper GI Surgeons Committee. There were 13 questions regarding treatment protocols according to T category (pT1a/pT1b, pT2), treatment of previous port sites, staging protocols, surveillance policies, timing of surgery after LC, extent of lymphadenectomy and management of the extrahepatic biliary tree.

Results There were 48 completed questionnaire. Over 80% would consider simple LC an adequate treatment for T1a tumours. 30% do not advocate radical surgery for T1b and 50% would not perform regional lymphadenectomy. 5% would not further treat T2 tumours and 23% would not add regional lymphadenectomy. Over 50% would not resect port sites. About 50% would consider chest and abdomen CT only for staging. About 30% and 80% would recommend surveillance for CT or MRI for 2–5 years for T1 and T2 tumours after extended resection respectively. 72% would advocate surgery as soon as possible. 22.5% and 20% would perform coeliac trunk lymphadenectomy if staging confirms positive nodes and routinely excise the extrahepatic biliary tree respectively.

Conclusion The only chance of cure for GBC is complete tumour excision. There is heterogeneity among UK surgeons regarding treatment, staging and surveillance policies. According to the survey, UK practice does not fully comply with published evidence for T1a and T2 categories. Although there is increased evidence that T1b tumours would benefit from extended resection only 50% would perform a regional lymphnode dissection. Clear guidelines would help standardisation of staging and surveillance policies.

Competing interests None declared.

PTU-085 IMPACT OF TRANSIENT ELASTOGRAPHY (FIBROSCAN) IN THE MANAGEMENT OF PATIENTS WITH LIVER DYSFUNCTION IN A REGIONAL CENTRE IN NORTHERN IRELAND

doi:10.1136/gutjnl-2012-302514c.85

G P Manikpure,* J Cash, N McDougall. *Hepatology, Royal Victoria Hospital, Belfast, UK*

Introduction Transient elastography (Fibroscan) is a simple, non-invasive method of assessing liver fibrosis. It is measured by an ultrasound transducer probe and results are expressed in kilo-Pascals (kPa) with liver stiffness values ranging from 2.5 to 75 kPa. The results are immediately available and are operator-independent. Liver biopsy has long been the gold standard to evaluate fibrosis. Unfortunately, it is invasive and associated with complications. In addition the accuracy of the histology sample is subject to significant heterogeneity. Our aim was to determine how effective Fibroscan is in reducing the need for liver biopsy.

Methods All patients undergoing Fibroscan during a 1-year period from 1 August 2010 to 31 July 2011 in the Royal Victoria Hospital, Belfast were included. Patients who had biopsy pre-planned for the same day as Fibroscan were excluded. The following data were recorded: demographic data, Fibroscan readings, indication for Fibroscan and whether or not Fibroscan prevented the need for subsequent liver biopsy. All patients had at least 10 valid readings.

Results 66 patients (36 male) underwent Fibroscan to evaluate if there was any evidence of advanced fibrosis or cirrhosis. The underlying liver diagnoses were Hepatitis C (30), fatty liver disease (7), primary biliary cirrhosis (7), hepatitis B (6), hereditary haemochromatosis (4), deranged liver function tests (4), alcoholic liver disease (3), orthotopic liver transplant (2) and 1 each for cryptogenic cirrhosis, primary sclerosing cholangitis and hyperferritinaemia. Thirty-nine patients had a normal Fibroscan of whom 37 (95%) did not require a follow-up liver biopsy. 27 patients had high readings suggesting advanced liver fibrosis or cirrhosis of whom 8 (30%)

required liver biopsy. Of the remainder, 16 (59%) did not require biopsy because Fibroscan had answered the clinical question and three failed to attend for review. Overall, 53 (80%) did not require a liver biopsy after Fibroscan was used to determine the presence or absence of advanced fibrosis or cirrhosis.

Conclusion In our cohort, Fibroscan prevented the need for liver biopsy in 80% of patients. Our main use of the test has been in attempting to identify patients with cirrhosis who might need hepatoma screening. Fibroscan is highly effective in reducing the need for biopsy in such cohorts.

Competing interests None declared.

PTU-086 KLF6 SPLICE VARIANT 1 IN PATIENTS WITH COLORECTAL LIVER METASTASIS CORRELATES WITH A HIGHER CLINICAL RISK SCORE

doi:10.1136/gutjnl-2012-302514c.86

^{1,2}K Y D Hui,* ^{2,3}S Robinson, ¹G L Patman, ²D Manas, ^{1,4}H L Reeves, ^{2,3}S White. ¹Northern Institute for Cancer Research, Newcastle University, Newcastle upon Tyne, UK; ²Department of HPB and Transplant Surgery, Freeman Hospital, Newcastle Upon Tyne, UK; ³Institute of Cellular Medicine, Newcastle University, UK; ⁴Department of Hepatology, Freeman Hospital, Newcastle upon Tyne, UK

Introduction In its wild type form KLF6 (KLF6-WT) acts as a tumour suppressor gene whose expression is lost in a variety of human cancers. Conversely, KLF-6 splice variant 1 (KLF6-SV1) is able to function as an oncogene playing an important role in tumour proliferation and invasion. The aim of this study was to determine how the expression of these two KLF6 variants in patients with colorectal liver metastases (CRLM) correlates with an established prognostic scoring system.

Methods Patients undergoing resection of CRLM over a 2-year period were identified for inclusion within this study. Immunohistochemistry was performed using antibodies directed against KLF6-WT and KLF6-SV1 on formalin fixed paraffin embedded tumour samples and the proportion of positively stained nuclei for each was determined using an automated computerised image analysis system. Clinical data were collected and Fong's Clinical Risk Score (CRS) was calculated as a marker of patients outcome. Spearman's correlation coefficient was used to determine the relationship between nuclear staining of KLF-6 and the CRS. Continuous variables were compared with Mann-Whitney U test. A p value <0.05 was considered significant.

Results 25 patients (male 64 %) were included in this study with a mean age of 69.2 years (range 52–81). The distribution of CRS were as follows; CRS score 0 n=2, CRS score 1 n=6, CRS score 2 n= 3, CRS score 3 n=10, CRS score 4 n=3, CRS score 5 n=1. Nine patients developed recurrence within 1 year of liver resection. All patients remained alive at the end of the study period. There was a positive correlation between KLF6-SV1 and the calculated CRS (Spearman's correlation coefficient = 0.481, p=0.015) whereas no such correlation existed with KLF6-WT. In those with a CRS <3 the mean proportion of positive nuclear staining for KLF6-SV1 was 5% as compared to 15% in those with a CRS ≥3 (p<0.05)

Conclusion In this preliminary study, high expression of KLF6-SV1 in patients with CRLM correlates with a higher CRS. Further long-term follow-up data are required to determine what affect this has on prognosis and overall patient survival.

Competing interests K Y D Hui: Grant/Research Support from: Cancer Research UK, the Dowager Countess Eleanor Peel Trust, S Robinson: None declared, G Patman: None declared, D Manas: None declared, H Reeves: None declared, S White: None declared.

PTU-087 MANAGEMENT OF PYOGENIC LIVER ABSCESS: AN 11-YEAR RETROSPECTIVE STUDY OF PRACTICE AT A METROPOLITAN HOSPITAL AND DEVELOPMENT OF LOCAL GUIDELINES

doi:10.1136/gutjnl-2012-302514c.87

¹M E B Fitzpatrick,* ¹S Pomfret, ¹M Foxton, ²S Portsmore. ¹Department of Gastroenterology, Chelsea and Westminster Hospital, London, UK; ²Department of Acute Medicine, Chelsea and Westminster Hospital, London, UK

Introduction Pyogenic liver abscess (PLA) is an uncommon condition associated with considerable morbidity and mortality despite modern treatment. Patients have prolonged lengths of stay, require repeated imaging and procedures, and frequently develop significant complications. We audited the burden of PLA and the outcomes of treatment in Chelsea and Westminster Hospital, London. We used our data to develop local guidelines for PLA, incorporating information from previous case series and a review of the literature.

Methods Between January 2000 and September 2011, 41 patients had a correctly coded diagnosis of PLA. Electronic or paper medical records were available for 40 patients. We collected anonymised information regarding the medical history, investigations and clinical course.

Results 40 patients (78% male, mean age 54 years, 70% caucasian) were treated for acute PLA, with no in-hospital deaths. Mean length of stay was 19.3 days (CI 15.1 to 23.4 days). Presentations were non-specific, and the diagnosis rarely considered on admission. Blood results in most patients on admission demonstrated a characteristic pattern of hypoalbuminaemia, high CRP, and non-specific liver dysfunction. 61.1% of patients were septic on admission. In general, appropriate imaging was arranged early in the admission. Diagnosis of PLA was made with CT (54%) or ultrasound (46%). 75% of abscesses were found in the right lobe, with a mean maximum diameter of 6.5 cm (SD 2.4 cm). 48% of patients had multiple abscesses, and 40% had signs of loculation on imaging. 78% of abscesses were larger than 5 cm. 68% of abscesses were aspirated or drained, with three patients requiring repeated intervention, and one referred to a hepatobiliary unit. Length of stay was longer in older patients (p<0.05), those requiring drainage (23.8 vs 11.3 days, p<0.001) and those with complications (28 vs 11.8 days, p<0.001). Abscess size was not related to length of stay or need for drainage. Decisions regarding antibiotics and drainage varied between clinicians. Severe complications developed in 50% of patients and included venous thrombosis (n=4) and need for ITU support (n=4). Resolution was typical, with no in-hospital mortality. Underlying causes for PLA included abdominal malignancy (n=4), appendicitis (n=2) and diabetes mellitus (n=5). Often no cause was found, and screening for causes with MRCP and colonoscopy was not universal.

Conclusion Our study describes a large UK cohort of patients with PLA, with a lower mortality than described in other case series, and good outcomes without drainage in selected patients with large abscesses. Our cohort showed considerable variation in PLA treatment, and in response we have developed PLA management guidelines.

Competing interests None declared.

PTU-088 THE MICROFLORA OF BILE AFTER INTRAOPERATIVE ASPIRATION OF THE GALLBLADDER DURING CHOLECYSTECTOMY FOR ACUTE CHOLECYSTITIS

doi:10.1136/gutjnl-2012-302514c.88

M S J Wilson,* K Seymour. General Surgery, North Tyneside General Hospital, North Shields, UK

Introduction Emergency cholecystectomy for the management of acute cholecystitis is now common. In order to facilitate this