

operative and clamping time, associated postoperative complications, postoperative stay, morbidity and mortality, long term results in malignant cases.

**Results.** In 25 patients we indicated laparoscopic liver resection. This is the 5.2% of all our resections in the same period. In 87.5 was by benign lesions, and in 12.5 by malignant tumours. Two patients (8.3%) were converted. The resections were minor in 21 cases and major in 1. Pringle manoeuvre was performed in 50% of the cases. Mean operative time was 170 min, and the mean length of stay was 3 days. We had no mortality and only one postoperative bile leak self limited (4.1%). In all malignant patient a safety minimal margin of 1 cm was obtained.

**Conclusions.** Laparoscopic liver resections, are safe and effective procedures for selected patients with benign and malignant liver lesions if it is performed by well trained surgeons.

#### 178 RADICAL SURGICAL MANAGEMENT FOR HEPATIC HYDATID CYSTS IN AN HPB CENTER FROM ARGENTINA

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**Background.** The echinococcosis is a common parasitic cystic disease in our country. Most usual localization is the liver (70%). Surgical management is still debated between radical and more conservative treatments. The purpose of this study is to analyze the radical surgical approach in a consecutive series of hepatic hydatid cysts treated at the same institution.

**Patients and Methods.** In a 10 year period (1996-2006) 55 patients underwent surgical treatment for hepatic hydatid cysts in our unit. Diagnosis was made by US and CT. Variables analyzed were: age, sex, initial symptoms, cyst characteristics, metastases, complications, average hospital stay, mortality and long term follow up. Standard pericystectomy technique consisted of total or subtotal (> 75%) excision of the cysts with the fibrous capsule. Follow up was performed by US every six months during the first year and then annually.

**Results.** 64.3% of the patients were female with a mean age of  $44.2 \pm 14$  (23-68) Symptoms were present in 93% and pain was the most common (83%). Right lobe was the most frequent localization (56.1%), mean size 9.2 cm and 43% were greater than 10 cm. Only 5 patients (12%) presented multiple lesions, and the irreducibility rupture was verified in 3 (7.1%). 45 radical

Tumor VI decrease was >90% in the target lobe in 6/13 (46%) patients. Mean decrease in ALBI in liver field resection in chemo-SIRT and chemo-only were 91.3% and 27.9% respectively ( $p < 0.01$ ). Pathologic response correlated with PETA/CT parameters of objective response in patients who subsequently underwent resection.

**Conclusions.** Chemo-SIRT as front-line therapy demonstrated significantly improved objective tumor responses as determined by decrease functional tumor volume and maximal glycolytic index in comparison to chemotherapy alone. Chemo-SIRT concept needs to be further evaluated for its potential role in surgical downstaging, and its impact on recurrence and survival.

#### 180 STAGED LIVER RESECTION FOR EXTENSIVE BILOBAR COLORECTAL LIVER METASTASES

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**Objective.** To assess the outcomes of patients undergoing two-stage liver resection for extensive bilobar colorectal cancer (CRC) metastases.

**Background.** Liver resection is a standard of care for patients with CRC metastases. Liver resection has been shown to improve long term survival and offers the only potential for cure. By present standards, only 20% of patients are eligible for resection at the site of presentation due to the extent of hepatic disease. Staged resections, with or without portal vein embolization, allows for regeneration of the liver between procedures and permits more extensive resection. Staged liver resection can increase the number of patients eligible for resection with curative intent.

**Methods.** Patients who were planned to undergo staged resection for CRC metastases at the McGill University Health Center were identified. The resection strategy was based on preservation of the middle hepatic vein and a liver remnant consisting of segments 1 and 4. The first stage consisted of clearance of one lobe of the liver by either right lobectomy or left lateral segmentectomy with wedge resection of segments 1 and 4 as necessary. The second stage operation consisted of resection of the contralateral lobe. All patients received neoadjuvant chemotherapy prior to the initial hepatic resection, as well as adjuvant chemotherapy following each liver resection to prevent disease progression. The patients (41.7%) underwent portal vein embolization as part of the staged procedure.

**Results.** Twenty-three patients (15 male, 8 female) were identified between January 2003 and April 2007. The median age was 53 years. The average number of lesions on preoperative CT scan was 5.5 and the median clinical risk score was 3 (Fong et al 1997). Sixteen patients (69.6%) completed the staged resections. The overall 1- and 4-year survival were 73.2% and 78.8% in the group that completed the staged resections, and 57.1% and 28.6% respectively for the group who did not complete the staged procedure. The difference in survival was statistically significant ( $p = 0.01$ ). There were no cases of liver failure from inadequate residual functional liver.

**Conclusions.** Staged liver resection based on preservation of the middle hepatic vein can be achieved in a significant number of patients presenting with initially unresectable CRC liver metastases and results in excellent overall survival. This strategy increases the number of patients eligible for resection with curative intent. Patients who do not complete the staged resection seem to benefit from better than expected survival compared to patients in published series who received only chemotherapy.

#### 181 LAPAROSCOPIC LIVER RESECTION: DISTRIBUTION OF COMPLICATIONS

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Laparoscopic liver resection is emerging as an acceptable alternative to its open counterpart with comparable morbidity and mortality. However, this approach is currently limited to high volume centers experienced with the

curative therapy. In our institution all patients who prospectively maintain tumor apparently isolated were reviewed.

**Results.** 866 patients were of those ( $n = 77$  patients metastatic disease only) (33%) patients underwent and 63% had bilateral disease, 30% ( $n = 27$ ) 44) patients had prior C stage and 2 two-stage b resection of their primary resection seem to benefit from better than expected survival compared to patients in published series who received only chemotherapy.

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HEPATIC HYDATID CYST (PERICUTANEAL PIRATION)**