

as stable disease. Nine patients (69.2%) are alive after a median of 62 days of follow-up (16–237).

Conclusions: In the present series, the treatment with Sorafenib were associated with a high prevalence of adverse events. Withdrawal of treatment secondary to severe adverse events were needed in more than 50% of cases. Nevertheless, short-term significant deterioration of liver biochemical and function tests were not detected.

363 HEPATOCELLULAR CARCINOMA IN PATIENTS WITH PRIOR HEPATITIS B SURFACE ANTIGEN SEROCLEARANCE – THE COAST IS NOT CLEAR

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Background: Patients with hepatitis-B-antigen seroclearance remain at risk of developing hepatocellular carcinoma (HCC) even after successful seroconversion. Whether this subset of HCC patients differs from HCC patients who are hepatitis-B-surface-antigen-positive carriers remains unclear.

Aim: To examine the differences in epidemiology, tumor biology and prognosis between HCC patients with hepatitis-B-surface-antigen-positive chronic hepatitis B infection and those with prior hepatitis-B-surface-antigen seroclearance.

Materials and Methods: A retrospective analysis was performed of 638 patients diagnosed with HCC in our department between 1988 and 1997. Patients with serological evidence of prior hepatitis B infection but negative for hepatitis-B-surface-antigen (HBsAg-negative) (n=97) were compared with the larger group of patients who were hepatitis-B-surface-antigen-positive (HBsAg-positive) carriers (n=344). Differences in epidemiological factors, alpha-fetoprotein (AFP) levels, severity of disease at presentation and survival were examined.

Results: 93.8% of the HBsAg-negative group was >45 years of age at presentation compared to 82.0% of the HBsAg-positive group (p=0.004). In both groups, the majority of the patients were male, with no significant difference in the ethnicity. The median AFP level at diagnosis in both groups were comparable. 14.6% of HBsAg-negative patients presented with normal AFP levels (AFP < 10 µg/L) compared to 9.9% in the HBsAg-positive group (p=0.198). Severity of disease was similar between the two groups. There was no significant difference in the Childs score, TNM stage, portal vein involvement and presence of metastases. Kaplan-Meier analysis of survival showed that HCC patients in both groups shared the same prognosis (p=0.75).

Conclusions: Hepatitis B patients remain at risk of developing HCC despite hepatitis-B-surface antigen seroclearance. Those who develop HCC present at a later age compared to HBsAg-positive carriers. However, the severity of the disease and the prognosis of HCC is no different from HBsAg-positive patients, despite the loss of surface antigen and the development of anti-HBc and/or anti-HBs antibodies. Hence patients with chronic hepatitis B who achieve seroclearance with loss of HBsAg should remain within a surveillance program as they have a considerable risk of developing HCC.

364 PERCUTANEOUS ACETIC ACID INJECTION VERSUS PERCUTANEOUS ETHANOL INJECTION FOR SMALL HEPATOCELLULAR CARCINOMA: A LONG-TERM FOLLOW UP STUDY

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Background and Aims: The long-term outcome of percutaneous acetic acid injection (PAI) and percutaneous ethanol injection (PEI) for treating small hepatocellular carcinoma (HCC) remains unclear.

Methods: From July 1998 to July 2004, 125 patients with hepatocellular carcinoma (HCC) were enrolled. Seventy patients receiving PAI and 55 patients receiving PEI were enrolled. There were no significant difference in clinical characteristics and biochemical data between the two groups. Tumor recurrence and survival rates were assessed.

Results: Mean follow-up time was 42 months. The five year local recurrence rate was 36% in the PAI group and 33% in the PEI group (P=0.892). The five year new tumor recurrence rates was 71% in the PAI group and 69% in the PEI group (P=0.261). The five year overall survival rate was 43% in the PAI group and 26% in the PEI group. The PAI group had significantly better survival than the PEI group (P=0.027). Multivariate analysis revealed PAI was the significant factor associated with overall survival (PAI vs PEI, RR: 0.639, 95% CI: (0.419–1.975), P=0.038). The five year recurrence free survival rate was 10% in the PAI group and 8% in the PEI group (P=0.073). One patient (1.6%) in the PAI group developed a major complication. The treatment sessions required to achieve complete tumor necrosis were significantly fewer in the PAI group than the PEI group (2.4±1.0 vs 2.9±1.3, P=0.018).

Conclusions: PAI required fewer treatment sessions than PEI and provided better survival after long-term follow-up. Adverse events were similar.

365 COMPARATIVE PROTEOMICS ANALYSIS TO IDENTIFY BIOMARKERS OF HEPATOCELLULAR CARCINOMA

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To facilitate the identification of candidate molecular biomarkers that are linked to the pathogenesis of hepatocellular carcinoma, we investigated protein expression profiles of 4 pairs of tumors and the adjacent non-tumor resected from HCC patients using by 2DE. 197 protein spots were found to be significantly different between the two groups. Four candidate biomarkers including methionin adenosyltransferase 1 (MAT1), sulfotransferase 1 (SULT1), apolipoprotein E (ApoE) and heat shock protein 27 (HSP27) showed a distinct expression pattern in hepatocellular carcinoma compared to the surrounding non-tumor tissues. We further verified the signature of the 4 key biomarkers in 21 pairs of HCC tissues by Western blotting and immunohistochemistry. Methionin adenosyltransferase 1 (MAT1) and sulfotransferase 1 (SULT1) were significantly down-regulated, whereas apolipoprotein E (ApoE) and heat shock protein 27 (HSP27) were up-regulated in HCC. The sensitivity and specificity of the individual biomarkers for the diagnosis of HCC were 76.2% and 95.2% for ApoE, 66.7% and 71.4% for HSP27, 95.2% and 71.4% for SULT1, and 57.1% and 85.7% for MAT1. When at least 2 of them were positive, the sensitivity and specificity were significantly improved to 100% and 90.5%. The present HCC proteome approach may be useful for identification of individual proteins which may offer a novel way to diagnose HCC.