

Evaluating patients with cirrhosis for hepatocellular carcinoma: value of clinical symptomatology, imaging and alpha-fetoprotein.Oncology

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Abstract

Objective: This study was undertaken to assess the value of clinical symptomatology, abdominal ultrasound (US), triple-phase CT (TPCT) and serum alpha-fetoprotein (AFP) estimation in predicting presence of hepatocellular carcinoma (HCC) among patients with cirrhosis.

MATERIALS AND METHODS: In this cross-sectional study, Child's A/B cirrhosis patients were subjected to clinical evaluation, US, TPCT and serum AFP estimation. Sensitivity and specificity of clinical symptoms and of AFP at different cut-off levels were determined.

Detection rate of HCC and agreement between US and TPCT was estimated. **RESULTS:** A high proportion of enrolled subjects had HCC at first presentation (40.7%). Significantly higher prevalence of abdominal pain, weight loss, and anorexia was seen in patients with cirrhosis with HCC compared to those without HCC. Sensitivity and specificity of any of these symptoms was 73 and 79%, respectively (positive and negative predictive values of 65 and 85%, respectively). A 100% agreement between TPCT and US was observed for diagnosing HCC cases. However, TPCT detected a greater number of smaller HCCs. Sensitivity of AFP at 400 ng/ml cut-off was only 25.7%, too low to be useful. Best mix of sensitivity (77.2%) and specificity (78.1%) of AFP was found to be at 10.7 ng/ml cut-off which falls within the conventional limits of normalcy.

CONCLUSION: The study highlights the importance of symptomatology of weight loss, abdominal pain or anorexia as markers for HCC in patients with cirrhosis. AFP was not found to be a useful screening test. TPCT should be undertaken in all cirrhotics presenting to the hospital for the first time. Copyright 2007 S. Karger AG, Basel.