## HEPATITIS B AND C POSITIVITY RATES IN SOLID TUMORS AND REACTIVATION RATES DUE TO CYTOTOXIC CHEMOTHERAPY

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Introduction - Purpose: The aims of this study are determining Hepatitis B and C positivity rates in patients with solid tumors and comparing these rates with healthy population, and also determination of hepatitis reactivation rates due to cytotoxic chemotherapy

Methods - Tools: Patients with solid cancer (8322) were retrospectively evaluated and their results were compared with control group that consisted of 96,000 subjects

Findings: In control groups, HBsAg (Hepatitis B surface antigen) positivity rate was 3.3% and anti-HCV positivity rate was 0.84%. In cancer patients, HBsAq positivity rate was 3.65% and anti-HCV positivity rate was 1.2%. no difference was detected in HBsAg positivity rate and anti-HCV positivity rate between patients and controls (p = 0.12 and p = 0.09, respectively). HBsAg positivity rates of head and neck cancer (5.88%; p = 0.02), rectum (5.6%; p = 0.025) and gastric and esophagus cancer (5.88%; p = 0.025) were significantly higher than control groups. Anti-HCV positivity rate (2.5%; p = 0.0016) was significantly higher in lung cancer when compared with control group. Liver function tests of 96 of 355 patients (27%) who HBsAg, anti-HCV, or anti-HBc positivity, have increased during follow-up time. Determined causes of high liver function tests were as follows:chemotherapy regimen (49%); hepatitis reactivation (25%); liver metastasis (18%); unknown origin (7%); and sepsis (1%). We have determined hepatitis reactivation in 19 patients (18%) with HBsAg positive, in 3 patients (2%) with anti-HBc positive, and in 2 patients (5%) patients with anti-HCV positive. There was a significant relation between lymphoma and hepatitis reactivation (p = 0.032). The most frequent chemotherapy regimens that were associated with hepatitis reactivation were R-CHOP (3 patients, 12.5%), FUFA (3 patients, 12.5%), adriablastinecyclophosphamide (AC) (2 patients, 8%).

Discussion: Hepatitis B positivity rates were significantly higher in patients with head and neck cancer, rectum cancer or gastric and esophagus cancer than normal population. Hepatitis reactivation occurred in twenty-five percent of patients who had positive hepatitis B serology and received chemotherapy

Keywords: Hepatitis B and C positivity rates, solid tumors and reactivation rates, cytotoxic chemotherapy