

THE RELATION OF LYMPHOMA AND HEPATITIS B VIRUS/HEPATITIS C VIRUS INFECTIONS IN THE REGION OF EAST BLACK SEA, TURKEY

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Aim and background: Hepatitis B virus (HBV) and hepatitis C virus (HCV) are not only hepatotropic, but also lymphotropic viruses. Infections with these viruses induce chronic antigenicity and may stimulate clonal expansion of malignant B-cell neoplasms. Moreover, these viruses can proliferate in lymphatic structures and bone marrow. However, the relationship between lymphomas and HBV/HCV infections is not clear. In our region of the East Black Sea, Turkey (the city of Trabzon), we intended to demonstrate a relation of lymphoma and HBV/HCV infections with a case-controlled study.

Methods: A total of 109 patients diagnosed with lymphoma between 2002-2005 in the Black Sea Technical University Hospital was investigated. Seventy-one patients had a high-grade

and 38 patients a low-grade lymphoma. Hepatitis B surface antigen (HBsAg) and anti-HCV antibodies (anti-HCV Ab) were screened. The control group consisted of patients (n = 551) from other departments with diagnoses other than lymphoma. **Results:** HBsAg was 3.7% and anti-HCV Ab positivity was 2.8% in lymphoma patients, compared with control of 5.3%, 5.1%, respectively. There was no statistically significant difference between two groups ($P = 0.7$, OR = 0.69, 95% CI, 0.20-2.10; $P = 0.4$, OR = 0.53, 95% CI, 0.13-1.86, respectively).

Conclusion: Our findings suggest that the incidence of HBV and HCV infections in lymphoma patients is no different than that of nonlymphoma patients. Therefore, no direct correlation can be deduced between lymphoma and HBV-HCV infections in our East Black Sea region of Turkey.

Key words: HBV/HCV infections, lymphoma.