Medical Xpress

Predictors of immune response to hep B shot ID'd in lymphoma

October 28 2019

(HealthDay)—For patients with lymphoma, the dose and frequency of

hepatitis B vaccination, sex, Ann Arbor stage, and ibrutinib as part of the chemotherapy regimen are independent factors that affect the impact of the vaccine, according to a study published online Oct. 16 in *Leukemia & Lymphoma*.

Wei-Huang Zhuang and Ya-Ping Wang, from The Second Affiliated Hospital of Fujian Medical University in Quanzhou, China, analyzed clinical data from 315 patients to examine immunity effects after vaccinating patients with different doses and frequencies of hepatitis B vaccines. Patients were divided into three groups: the low-dose group; high-dose group; and high-dose, high-frequency group.

The researchers found that independent factors affecting the immunity effects of hepatitis B vaccine in patients with lymphoma included the dose and frequency of vaccination, sex, Ann Arbor stage, and whether the chemotherapy regimen contained ibrutinib or not (odds ratios, 2.663, 3.106, 0.195, and 8.115, respectively) in multivariate logistic regression. The highest seroconversion rate for hepatitis B surface antibody was observed in the high-dose, high-frequency group.

"The result of our study is of great significance for the prevention of hepatitis B virus infection in patients with lymphoma and even other hematological diseases," the authors write. "Large-scale prospective clinical trials involving different doses and frequencies of vaccination as well as combined immunopotentiators are needed to further explore the optimal regimens for hepatitis B vaccination in patients with lymphoma ."

More information: Abstract/Full Text