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627.AGGRESSIVE LYMPHOMAS: CLINICAL AND EPIDEMIOLOGICAL

Provisional Prognostic Score for Plasmablastic Lymphoma

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Background
Plasmablastic Lymphoma (PBL) is a rare and aggressive subtype of non-Hodgkin's lymphoma. It tends to be associated with immunosuppressive clinical contexts, such as HIV infection and immunosuppressive therapies for autoimmune disorders and organ transplants. However, due to the rarity of the disease, which needs to be better understood, varied treatment approaches have been implemented, and no optimal data or guidelines for managing PBL are available. Therefore, we conducted this study to develop a provisional PBL prognostic score (PBLPS) for this rare disease.

Methods
We used our constructed PBL database, which contains retrospective data on 300 cases. Such data included demographics such as sex, age, and race. It also included disease presentation symptoms, duration of symptoms before diagnosis, site(s) of the disease, blood counts, coexisting comorbidities, disease immunohistochemical and molecular phenotype, types of treatment, and survival outcomes. Of the 300 cases, 291 had complete survival and outcomes data, the sample chosen for this study. Cox proportional-hazards model and Log-rank tests were used to assess the influence of clinicopathologic factors on overall survival (OS). We included factors that statistically impacted OS and scored them by the impact of their hazard ratios.

Results
The median OS of the cohort was 25 months. The following dichotomous variables were identified as impactful prognostic factors in this cohort: LDH>500 ($p=0.04$), CD4<100 ($p=0.006$), bone marrow (BM) involvement ($p<0.0001$), EBER-negative ($p=0.01$), HHV8+ ($p=0.02$), and involvement of liver ($p=0.003$), lungs/pleura ($p<0.0001$), and upper GI tract ($p=0.001$). A prognostic model was devised using these variables to identify different levels of risk. Involvement of BM and involvement of any of the worse prognosis organs (liver, lung/pleura, and/or upper GI tract) were each assigned a score of 2 when present. CD4<100, EBER-negative, and LDH>500 were assigned 1 point each as they had the lowest hazard ratios of all the other variables. In this exploratory cohort, we assigned low risk a score of 0, intermediate risk a score of 1-2, and high risk a score of 3-7. This prognostic score system led to our cohort's most optimal risk discriminatory model, where low, intermediate, and high risk had a median OS of NR, 15, and 4 months, respectively ($p<0.0001$).

Conclusion
This PBLPS is a promising new tool for risk-stratifying patients with PBL. However, it still requires prospective validation.

Disclosures No relevant conflicts of interest to declare.

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