4. THE IMPACT OF COVID-19 ON PATIENTS WITH NON-HODGKIN LYMPHOMA

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Introduction. Patients diagnosed with coronavirus 2019 (COVID-19) disease during hematological malignancies have been described as having a poor outcome, with only a few reports specifically addressing patients with lymphoma. Various studies are available on the impact and mortality rates of COVID-19 in hematological malignancies, reporting mortality rates between 33% and 52%, however, specific studies for lymphoma subtypes are very limited.

Aim of study. Studying the influence of COVID-19 infection on patients with non-Hodgkin's lymphomas.

Methods and materials. We studied medical scientific literature data, identified by Google Search, from medical databases PubMed, Cochrane, Scopus, international clinical guidelines, WHO, NCCN, ESMO.

Results. Among the genetic variants that confer increased susceptibility to SARS-CoV-2 infection those that express angiotensin-converting enzyme (ACE) receptors are key factors in the cross-linking of SARS-CoV-2 cell membranes, and HLA-DRB1 alleles were more frequently observed in symptomatic patients with COVID-19. The infection with SARS-CoV-2 with very severe respiratory symptoms may be a potential risk factor for diffuse large B-cell lymphoma. According to Visco et colab. (2022) there were no differences in survival of patients on active anti-lymphoma treatment (≤6 months) compared to all others. Passamonti F. et al. colab. (2020) and the European Hematology Association reported results from 132 centers in 32 countries, revealing that COVID-19 was the main cause of death in 173 patients (14.6%) of hematological malignancy studied patients. Bonuomo V (2021) described in his study that the persistence of positive PCR for SARS-CoV-2 after week 6 was significantly associated with mortality. The available evidence suggests that in patients with mature B-cell NHL, bendamustine and anti-CD20 were generally associated with worse COVID-19 outcomes, while tyrosine kinase inhibitors had either a neutral or protective effect.

Conclusion. It is imperative to understand the COVID-19-related outcomes of lymphoma patients so that the medical management of lymphoma may be optimized.