

# Myocardial infarction as a predictor of diffuse large B cell lymphoma?

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**KEYWORDS:** lymphoma, myocardial infarction.

**CITATION:** *Cardiol Croat.* 2024;19(3-4):111. | <https://doi.org/10.15836/ccar2024.111>

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**Introduction:** Patients with cancer have an increased risk of both venous and arterial thromboembolism (AT)<sup>1</sup>. Aggressive lymphomas like the most common type - diffuse large B cell lymphoma (DLBCL) have a higher frequency of AT compared to indolent ones after diagnosis and during treatment<sup>2,3</sup>. However there is little information about the frequency of AT such as myocardial infarction (MI) before the diagnosis of DLBCL. *Aim:* To determine the prevalence of MI in DLBCL before diagnosis.

**Patients and Methods:** We collected data retrospectively from DLBCL patients at the General Hospital Dr. Josip Benčević from the beginning of 2011 by August 2023.

**Results:** 59 DLBCL patients were included in this study, 33 (56%) female, median age 67 (range 28 to 82 years). Eight (13.6%) patients had MI before the DLBCL diagnosis, 6 male and 2 female. All eight patients who had a MI achieved a complete remission (CR) of the DLBCL after the planned treatment (4 patients treated with R CHOP and 4 with DA R EPOCH protocol). Seven patients are alive, with no signs of DLBCL, and 1 patient died 8 years after the end of treatment at the age of 84. The rate of CR in the entire study population was 83% after first line of treatment and 47 (63%) patients are still alive in CR. 6 patients died of DLBCL, 8 of infectious complications, while the cause of death for 8 patients is unknown. 2 patients had MI after diagnosis of DLBCL. One 5 years after the completion of chemotherapy and he previously had an MI, while the other patient developed an MI at the time of relapse of DLBCL.

**Conclusions:** Our study suggests a higher prevalence of IM in patients with DLBCL (13.6%) than in general population (3.8%)<sup>4</sup>. Interestingly in our study is the fact that a previous MI did not negatively affect the outcome of treatment. The group of patients with a previous MI actually had a better survival compared to the entire study population. Further studies with more patients are needed to confirm this observation, and eventually to find a link between DLBCL and MI.

RECEIVED:  
October 14, 2023

ACCEPTED:  
October 27, 2023



## LITERATURE

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