

The incidence of cancer and acute coronary syndrome in the same patient is increasing significantly

 **Marijana Knežević Praveček^{1,2*}**,
 **Krešimir Gabaldo¹**,
 **Domagoj Mišković¹**,
 **Ivan Bitunjac¹**,
 **Blaženka Miškić^{1,2}**,
 **Katica Cvitkušić Lukenda¹**

¹General Hospital „Dr Josip Benčević“ Slavonski Brod, Slavonski Brod, Croatia

²Faculty of Dental Medicine and Health Osijek, Josip Juraj Strossmayer University of Osijek Osijek, Croatia

KEYWORDS: acute coronary syndrome, cancer, cardio oncology.

CITATION: *Cardiol Croat.* 2023;18(3-4):56. | <https://doi.org/10.15836/ccar2023.56>

***ADDRESS FOR CORRESPONDENCE:** Marijana Knežević Praveček, Opća bolnica „Dr Josip Benčević“, Andrije Štampara 42, HR-35000 Slavonski Brod, Croatia. / Phone: +385-98-550-328 / E-mail: marijana.pravecek@gmail.com

ORCID: Marijana Knežević Praveček, <https://orcid.org/0000-0002-8727-7357> • Krešimir Gabaldo, <https://orcid.org/0000-0002-0116-5929> • Domagoj Mišković, <https://orcid.org/0000-0003-4600-0498> • Ivan Bitunjac, <https://orcid.org/0000-0002-4396-6628> • Blaženka Miškić, <https://orcid.org/0000-0001-6568-3306> • Katica Cvitkušić Lukenda, <https://orcid.org/0000-0001-6188-0708>

Introduction: Cancer patients have an increased risk of cardiovascular diseases and a significant prevalence of acute coronary syndrome (ACS).¹ The increased presence of cardiovascular risk factors in this environment has been shown to lead to an interaction between these two conditions, influencing their therapeutic strategies and contributing to higher mortality. Cancer patients have generally not been evaluated in ACS trials, so treatment in these cases is still not fully known. The reported prevalence of cancer among patients with ACS ranges between 3% and 17%.

Methods and Results: We present the results of our observational study conducted from January 1 to December 1, 2022. The prevalence of cancer among patients with ACS who underwent percutaneous coronary intervention was about 11% (2% in active cancer treatment). The average age was 67 years and 73% were male patients. 42% of patients presented as an acute ST-elevation myocardial infarction. Intrahospital mortality was 2%. 64% of patient were treated with percutaneous coronary intervention and stents implantation. They were treated with dual antiplatelet therapy, in 70% ticagrelor, 17% prasugrel, others clopidogrel. It was found that prostate, lung, hematologic, colon, gynecologic and breast cancer are the most common types associated with ACS, which corresponds to our observations.

Conclusion: Management of ACS in patients with cancer can be challenging because of frailty, increased bleeding risk, thrombocytopenia, increased thrombotic risk, and the possible need for future surgery/interventions. Percutaneous coronary intervention improves the survival rate of ACS patients, lowering early and late cardiac events. The presence of cancer should not limit the effective and safe treatment of ACS but requires a strict assessment of the risk of bleeding and thrombosis, in both cases with pharmacological and interventional treatment. Patients with concomitant cancer and coronary artery disease should be represented in ACS studies.

RECEIVED:
February 14, 2023

ACCEPTED:
February 22, 2023



LITERATURE |

1. Lucà F, Parrini I, Abrignani MG, Rao CM, Piccioni L, Di Fusco SA, et al. Management of Acute Coronary Syndrome in Cancer Patients: It's High Time We Dealt with It. *J Clin Med.* 2022 Mar 24;11(7):1792. <https://doi.org/10.3390/jcm11071792>