Extended Abstract

Religious beliefs in choosing the best treatment modality for coronary artery disease

Josip Silović^{1*},

©Katica Cvitkušić Lukenda^{1,2},

• Marin Vučković³

¹General Hospital "Dr. Josip Benčević", Slavonski Brod, Croatia

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

³University Hospital Centre Osijek, Osijek, Croatia **KEYWORDS:** percutaneous coronary angioplasty, religious beliefs, blood transfusion.

CITATION: Cardiol Croat. 2024;19(3-4):107. | https://doi.org/10.15836/ccar2024.107

*ADDRESS FOR CORRESPONDENCE: Josip Silović, Opća bolnica "Dr. Josip Benčević", Andrije Štampara 42, HR-35000 Slavonski Brod, Croatia. / Phone: +385 91 552 5995 / E-mail: jsilovic93@gmail.com

ORCID: Josip Silović, https://orcid.org/0009-0002-9918-7575 • Katica Cvitkušić Lukenda, https://orcid.org/0000-0001-6188-0708 Marin Vučković, https://orcid.org/0000-0003-1010-181X

Introduction: Coronary heart disease is one of the leading causes of death and morbidity in the world. With the advancement of new treatment options, increasing emphasis is being placed on less invasive approach of treating coronary disease, i.e. percutaneous coronary interventions (PCI)¹. A certain population still benefits most from surgical treatment - coronary artery bypass grafting (CABG)². Cardiac surgery carries a certain risk of peri- and post-procedural bleeding and the need for blood transfusions

Case report: 64-year-old woman patient with long-term arterial hypertension, diabetes, a previous heart attack and PCI of the right coronary artery and ischemic cardiomyopathy with reduced systolic function of the left ventricle, was hospitalized for non-ST-elevation myocardial infarction. Coronary angiography verified three-vessel coronary disease with significant narrowing of the left main coronary artery (LMCA), left anterior descending artery (LAD), chronic occlusion of the circumflex artery, and significant narrowing of the right coronary artery (RCA). Considering the recent guidelines (threevessel coronary disease and diabetes), the patient was referred to a cardiac surgeon and accepted for CABG. As the patient refused to receive blood transfusions for religious reasons, cardiac surgery was abandoned considering the high risk of periprocedural bleeding. The case was presented to the Heart team, considering the wishes of the patient, and it was recommended to do PCI LMCA/LAD and RCA. It is a complex high-risk procedure with a CHIP (Complex High-Risk Indicated PCI) score of 7. As there was no hemodynamic instability and cardiac output were maintained, we did not decide to use mechanical circulatory support in advance. PCI of the ostial RCA with the placement of a drug eluting stent (DES) and then PCI of the LMCA/LAD with the placement of 2 DES was performed. During the intervention, intravascular ultrasound was used to confirm good apposition of the stented segment. The patient was discharged with the recommendation of medications and further monitoring.

Conclusion: It is necessary to follow professional recommendations, but always keeping in mind patient's wishes. Refusal of transfusion treatment presents a difficulty in deciding about the most optimal treatment modality.

RECEIVED: October 15, 2023 ACCEPTED: October 27, 2023



- Neumann FJ, Sousa-Uva M, Ahlsson A, Alfonso F, Banning AP, Benedetto U, et al; ESC Scientific Document Group. 2018 ESC/EACTS Guidelines on myocardial revascularization. Eur Heart J. 2019 Jan 7;40(2):87-165. https://doi.org/10.1093/eurheartj/ehy394
- Protty M, Sharp ASP, Gallagher S, Farooq V, Spratt JC, Ludman P, et al. Defining Percutaneous Coronary Intervention Complexity and Risk: An Analysis of the United Kingdom BCIS Database 2006-2016. JACC Cardiovasc Interv. 2022 Jan 10;15(1):39-49. https://doi.org/10.1016/j.jcin.2021.09.039