




Single-center first year experience and outcomes with Impella CP

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Introduction: Impella CP is a percutaneously inserted left ventricular assist device indicated for temporary mechanical cardiac support during high-risk percutaneous coronary interventions and for cardiogenic shock¹. Our single center's experience with Impella CP is a representation of the clinical advantages this device provides, which may result in the expansion of indications for its application.

Patients and Methods: This study is a single-center retrospective cohort analysis of hospitalized adult patients in whom Impella CP was applied for mechanical circulatory support.

Results: A total of 4 implanted Impella devices were utilized in 4 patients at Sestre Milosrdnice University Hospital Centre from January 2022 to November 2022. The overall survival rate was 100%. In three cases, Impella was used due to the extent of coronary disease and very high-risk percutaneous interventions, while in the last case, it was used due to cardiogenic shock and hemodynamic instability of the patient. All the Impella devices were extracted immediately after completion of the procedures. The puncture sites were closed in two cases with the Manta system, and in the other two cases with the Proglide closure device. There were no complications in our cohort.

Conclusion: Our hospital's experience with Impella has been excellent and we strive to establish this device as one of the main options for mechanical circulatory support.

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LITERATURE

1. Yastrebov K, Brunel L, Paterson HS, Williams ZA, Wise IK, Burrows CS, Bannon PG. Implantation of Impella CP left ventricular assist device under the guidance of three-dimensional intracardiac echocardiography. *Sci Rep.* 2020 Oct 15;10(1):17485. <https://doi.org/10.1038/s41598-020-74220-8>