Impact of recipient characteristics on survival after heart transplantation – a single-center experience

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Introduction: Heart transplantation (HTx) remains the gold standard and treatment of choice for advanced heart failure refractory to other methods¹. In this study we investigated the outcomes of patients after HTx undergoing follow up at the Department of Cardiology, Dubrava University Hospital and their dependence upon the recipient characteristics at the time of HTx.

Patients and Methods: We retrospectively examined the outcomes from 120 HTx between 1995 and November 2022, the recipient characteristics, and the impact of their comorbidities on survival.

Results: The mean recipient age was 53.6 years at the time of HTx, and 80.8% were male. Dilated cardiomyopathy was present in 51%, ischemic in 41% and 8% were other causes. Survival was studied using Kaplan-Meier curves. Early in-hospital mortality was 10.0%. The survival rates at 1, 5, and 10 years were 83.9%, 74.5% and 56.3% respectively, and the mean survival was 132.9 months (95% CI, 110.5-155.3). Among the characteristics of the donors, none was found to separately have an impact on survival. However, the Charlson Comorbidity Index (CCI) \geq 5 at the time of HTx was associated with a reduced survival, with a mean survival time of 91.0 months (95% CI, 67.0-115.0) compared to the group with CCI <5, whose mean survival of 157.4 months (95% CI, 129.6-185.2) was significantly better (p=0.004).

Conclusion: Heart transplantation remains an excellent treatment option for selected patients with advanced heart failure, but our data implies that the high overall recipient comorbidity burden negatively impacts the posttransplant survival.

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