

Documents

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Abstract

Background: When advanced heart failure occurs in cardiac amyloidosis, prognosis is poor. In this setting heart transplantation (HTX) is a treatment option for selected patients. We here present the results of post-transplantation outcomes in cardiac amyloidosis within the Eurotransplant area, investigating possible predictors of survival. **Methods:** Of 115 patients undergoing HTX due to cardiac amyloidosis in the Eurotransplant region between November 1987 and May 2020, detailed assessment prior to transplantation was available in 85 patients. The present study was conducted in a retrospective approach. Primary endpoint was mortality after HTX. Baseline variables were entered in a Cox proportional hazards model with the primary endpoint as a dependent variable. **Results:** Median overall survival following HTX was 6.3 years in the overall collective and the subgroup. Univariate Cox proportional hazards model revealed a significant relationship between overall survival and the transplantation period (2008 to 2020 vs 1987 to 2007; median survival 9.7 years vs 1.8 years, hazard ratio 0.45, $p = 0.01$). Further predictors were albumin concentration (hazard ratio 0.92, $p < 0.001$), and systolic blood pressure (hazard ratio 0.96, $p < 0.001$). The transplant period as well as albumin concentration remained significant independent predictors in the AL sub cohort in a multivariate Cox proportional hazards model. **Conclusions:** HTX is a viable treatment option for patients at an advanced stage of cardiac amyloidosis as overall survival after transplantation has improved in the modern age. Patients at a very advanced stage of the disease, indicated by low serum albumin and blood pressure, show worse outcomes following HTX. Optimal timing and careful patient selection may therefore be particularly important to further improve post-HTX survival in amyloidosis patients. © 2023 International Society for Heart and Lung Transplantation

Index Keywords

amino terminal pro brain natriuretic peptide, aspartate aminotransferase, biological marker, creatinine, serum albumin, troponin T, albumin; adult, all cause mortality, Article, autologous stem cell transplantation, blood pressure, body mass, central venous pressure, cohort analysis, controlled study, echocardiography, female, follow up, heart amyloidosis, heart left ventricle ejection fraction, heart transplantation, human, major clinical study, male, median survival time, outcome assessment, overall survival, oxygen consumption, oxygen saturation, proportional hazards model, pulmonary artery occlusion pressure, QRS interval, regression analysis, risk factor, survival rate, systolic blood pressure, amyloidosis, complication, heart failure, retrospective study; Albumins, Amyloidosis, Heart Failure, Heart Transplantation, Humans, Retrospective Studies

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