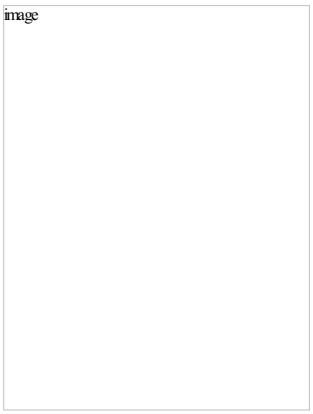

High dose catecholamine donor support and outcomes following heart transplantation

P. Angleitner, A. Kaider, J. Gökler, R. Moayedifar, E. Osorio-Jaramillo, A. Zuckermann, G. Laufer, A. Aliabadi-Zuckermann

www.elsevier.com/locate/bios

PII: S1053-2498(17)32192-7
DOI: https://doi.org/10.1016/j.healun.2017.12.015
Reference: HEALUN6678

To appear in: *Journal of Heart and Lung Transplantation*

Cite this article as: P. Angleitner, A. Kaider, J. Gökler, R. Moayedifar, E. Osorio-Jaramillo, A. Zuckermann, G. Laufer and A. Aliabadi-Zuckermann, High dose catecholamine donor support and outcomes following heart transplantation, *Journal of Heart and Lung Transplantation,* doi:10.1016/j.healun.2017.12.015

HIGH DOSE CATECHOLAMINE DONOR SUPPORT AND OUTCOMES FOLLOWING HEART TRANSPLANTATION

Angleitner P[1], Kaider A[2], Gökler J[1], Moayedifar R[1], Osorio-Jaramillo E[1], Zuckermann A[1], Laufer G[1], Aliabadi-Zuckermann A[1]

[1] Division of Cardiac Surgery, Department of Surgery, Medical University of Vienna, Austria

[2] Center for Medical Statistics, Informatics, and Intelligent Systems, Medical University of Vienna, Austria

Background:

Higher dose norepinephrine donor support is a frequent reason for donor heart decline although its associations with outcomes following heart transplantation are unclear.

Methods:

We retrospectively analysed 965 patients transplanted between 1992 and 2015 at the Heart Transplant Program Vienna. Stratification was performed according to donor norepinephrine dose administered before organ procurement (group 0: 0 µg/kg/min; group 1: 0.01 – 0.1 µg/kg/min; group 2: > 0.1 µg/kg/min). Sub-stratification of group 2 was performed for comparison of high-dose subgroups (group HD 1: 0.11 – 0.4 µg/kg/min; group HD 2: > 0.4 µg/kg/min). Associations between groups and outcome variables were investigated using a multivariable Cox proportional hazards model and logistic regression analyses.

Results:

Donor norepinephrine dose groups were not associated with overall mortality (group 1 vs. 0: Hazard Ratio (HR) 1.12, 95% Confidence Interval (CI) 0.87 - 1.43; group 2 vs. 0: HR 1.07, 95% CI 0.82 - 1.39; p = 0.669). No significant group differences were found for rates of 30-day mortality (p = 0.35), 1-year mortality (p = 0.897), primary graft dysfunction (p = 0.898), prolonged ventilation (p = 0.133), and renal replacement therapy (p = 0.324). Groups 1 and 2 showed higher rates of prolonged intensive care unit stay (18.9% vs. 28.5% vs. 27.5%, p = 0.005). High-dose sub-groups did not differ significantly in 1-year mortality (group HD 1: 14.3%; group HD 2: 17.8%; p = 0.549).