

MEETING ABSTRACT

Open Access

Routine surveillance endomyocardial biopsy for the detection of cellular rejection beyond 2 years after cardiac transplantation

Christian Heim*, Fatos Ballazhi, Thorsten Zielezinski, Markus Kondruweit, Michael Weyand, Rene Tandler

From World Society of Cardiothoracic Surgeons 25th Anniversary Congress, Edinburgh
Edinburgh, UK. 19-22 September 2015

Background/Introduction

Endomyocardial biopsy (EMB) is widely used for routine surveillance of cardiac allograft rejection. The need for continued EMB beyond the first year after cardiac transplantation is controversial.

Aims/Objectives

The aim of this study was to investigate the use of EMB in monitoring long term surviving heart transplant recipients.

Method

We conducted a retrospective chart review of all patients at our center 2 years or more after heart transplantation. 154 HTx patients between 2000-2012 were included in this study. Significant cellular rejection was defined as grade 2R or 3R using ISHLT nomenclature. Patients were analyzed assessing immunosuppressive regimen and procedural related complications.

Results

Of 154 cardiac transplant patients, 110 (71.4%) had a follow-up of more than 2 years. Interestingly, 17 of these long-term survivors of cardiac transplantation developed at least 1 episode of significant late (>2 years after Tx) cellular rejection (15.5%). Analyzing the respective immunosuppressive regimen showed increased number of calcineurin inhibitor (CNI)-free regimen (64.7%) in patients rejecting late after heart transplantation. The overall incidence of procedural related complications was low (1.0%) and none was life-threatening.

Discussion/Conclusion

The above data demonstrates that endomyocardial biopsies continue to detect clinically significant rejection beyond 2 years after cardiac transplantation. Late rejection was not depending on previous episodes of early cellular rejections. Therefore, we recommend long-term routine endomyocardial biopsies in cardiac transplant recipients especially in patients at high risk due to the immunosuppressive regimen.

Published: 16 December 2015

doi:10.1186/1749-8090-10-S1-A288

Cite this article as: Heim et al.: Routine surveillance endomyocardial biopsy for the detection of cellular rejection beyond 2 years after cardiac transplantation. *Journal of Cardiothoracic Surgery* 2015 **10**(Suppl 1):A288.

Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit



Department of Cardiac Surgery, Friedrich-Alexander University, Erlangen, 91054, Germany