Anti-MICA antibodies are related to adverse outcome in heart transplant recipients.

The clinical relevance of the post-transplant presence of anti-major histocompatibility complex class I chain-related A (MICA) antibodies as a marker for chronic graft failure in heart transplantation was examined using post-transplant sera from 159 heart transplant recipients. Mean follow-up after transplantation was 7 +/- 4.9 years. The sera were screened by Luminex (Luminex Corp, Austin, TX) for MICA antibodies. Samples that tested positive were confirmed using a Luminex MICA single-antigen bead assay. The antigen specificity of the detected antibodies was identified. Outcome parameters were survival, cardiac allograft vasculopathy (CAV), and cellular rejection. We retrospectively selected 159 patients: 107 with 0 or 1 rejection and 52 with 2 or more acute rejection episodes, of whom 36 (22.6%) had a positive screen for anti-MICA antibodies. In 19 of 36 samples, specific anti-MICA antibodies were confirmed by single antigen assay. The presence of post-transplant specified anti-MICA antibodies in patients’ sera was associated with acute rejection (63.2% vs 28.6%, p< 0.01) and CAV (78.9% vs 32.8%, p< 0.01). Multivariate analysis identified anti-MICA positivity as an independent risk factor for the development of CAV. The results indicate that anti-MICA antibodies may be related to adverse outcome after heart transplantation. Post-transplantation monitoring of
anti-MICA antibodies could identify patients with an increased risk for acute rejection and vasculopathy.

Zeitschriftentitel / Abkürzung:
J Heart Lung Transplant

Jahr: 2009
Band: 28
Heft / Issue: 4
Seiten: 305-11
Sprache: eng
Print-ISSN: 1053-2498
TUM Einrichtung:
chirurgie

Occurences:
- Einrichtungen > Fakultäten > Fakultät für Medizin > Kliniken und Institute > Lehr- und Forschungskooperationen mit den Kliniken und Instituten am Deutschen Herzzentrum > Klinik für Herz- und Gefäßchirurgie (Prof. Lange) > 2009

entries: