

Results: Patients with RV systolic dysfunction were found to have higher BNP values ($p=0.006$) and worse functional status (NYHA III-IV %, $p=0.04$) than group A. The univariate analysis of the echocardiographic parameters revealed that patients in group B had statistically (all p values <0.05) higher left atrial volume index (LAVI), higher degree of left ventricular diastolic dysfunction (represented by LV-E/Em), higher degree of functional mitral regurgitation (FMR), higher estimated pulmonary artery systolic pressure (PAPs), and higher degree of right ventricular diastolic dysfunction (represented by RV-E/Em). Multivariate regression analysis revealed that severe FMR ($p=0.006$) and RV-E/Em ($p=0.016$) were the independent predictors of RV systolic dysfunction.

Conclusion: Advanced FMR and worsening RV diastolic functions represented by RV-E/Em were established as the independent predictors of RV systolic dysfunction correlating with functional status and BNP levels in NICMP.

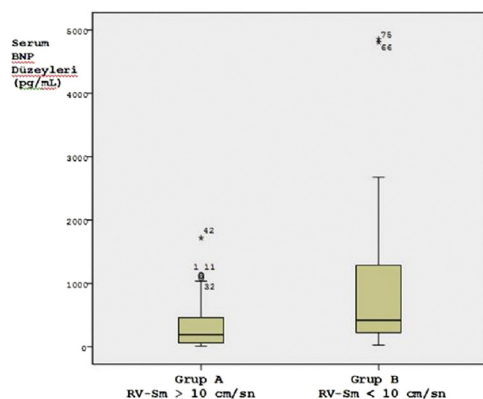


Table 1

| Değişken | Grup A (RV-Sm \geq 10 cm/sn) (n=48) | Grup B (RV-Sm $<$ 10 cm/sn) (n=31) | p değeri |
|---|---|--|----------|
| EE (%) | 32 \pm 4 | 30 \pm 5 | 0.29 |
| LVESV (cm ³) | 126 \pm 39 | 162 \pm 55 | 0.45 |
| LVEDV (cm ³) | 178 \pm 43 | 211 \pm 69 | 0.52 |
| Sferisite | 0.73 \pm 0.08 | 0.71 \pm 0.09 | 0.40 |
| LV-Sm (cm/sn) | 5.4 \pm 1.3 | 5.0 \pm 1.1 | 0.21 |
| E/A (mitral) | 1.55 \pm 0.8 | 1.7 \pm 0.8 | 0.52 |
| E/Em (LV) | 16.8 \pm 7.4 | 20.2 \pm 11.1 | 0.08 |
| LAVI (cm ³ /m ²) | 43 \pm 20 | 51 \pm 21 | 0.08 |
| FMY (ileri, %) | 25 (n=12) | 67 (n=21) | <0.001 |
| TAPSE (cm) | 2.2 \pm 0.3 | 1.6 \pm 0.4 | <0.001 |
| PABS (mmHg) | 30.8 \pm 19.2 | 40.7 \pm 15.3 | 0.01 |
| E/A (triküspit) | 1.2 \pm 0.3 | 1.1 \pm 0.4 | 0.06 |
| E/Em (RV) | 5 \pm 1.8 | 7 \pm 2.6 | 0.001 |

EE: Eieksiyon fraksiyonu, LVESV: Sol ventrikül end-sistolik volüm, LVEDV: Sol ventrikül end-diastolik volüm, LV-Sm: Mitral annül, sistolik doku Doppler velositesi, E/A: Pulse wave erken diastolik velosite / geç diastolik velosite, E/E': Pulse wave erken diastolik akım / doku Doppler erken diastolik velosite, LAVI: Sol atriyal volüm indeksi, TAPSE: Triküsipit annül, plan sistolik hareketi, PABS: Sistolik pulmoner arter basıncı.

Table 2

| Değişken | Beta | P değeri | Odds Oranı | Güvenlilik Aralığı |
|-----------|------|----------|------------|--------------------|
| İleri FMY | 1.47 | 0.006 | 4.38 | 1.5 - 12.6 |
| E/Em (RV) | 0.29 | 0.16 | 1.33 | 1.05 - 1.69 |

*: Hosmer and Lemeshow testi; p: 0.24 Nagelkerke R Square: 0.314

FMY: Fonksiyonel mitral yetersizliği, E/E': Pulse wave triküsipit inflow erken diastolik velosite / sağ ventrikül lateral annül erken diastolik doku Doppler velositesi, RV: Sağ ventrikül.

Cardiac Imaging

OP-178

Diagnostic Performance of Late Gadolinium Enhancement Analysis of Cardiac Magnetic Resonance Imaging in Monitoring Acute Cardiac Allograft Rejection

Evrin Şimşek¹, Sanem Nalbantgil², Naim Ceylan³, Mehdi Zoghi², Deniz Nart⁴, Mustafa Kurşun², Çağatay Engin², Tahir Yağdı², Mustafa Özbaran²
¹Batman State Hospital, Department Of Cardiology, ²Ege University Department of Cardiology, Izmir, ³Ege University Department of Radiology, Izmir, ⁴Ege University Department of Pathology, Izmir, ⁵Ege University Department of Cardiovascular Surgery, Izmir

Objective: After heart transplantation, allograft rejection is still an important cause of morbidity and mortality. Many techniques in cardiac magnetic resonance imaging were investigated to diagnose acute cellular rejection non-invasively in heart transplant recipients. However, there is not enough information about late gadolinium enhancement (LGE) in myocardium and acute cellular rejection.

Method: We prospectively analyzed our consecutive 41 heart transplant recipients who admitted for routine endomyocardial biopsies. Cardiac MRI was performed maximum four hours before the scheduled endomyocardial biopsy. Correlation between LGE of myocardium and acute cellular rejection was investigated.

Results: According to International Society Of Heart and Lung Transplantation (ISHLT) endomyocardial biopsy (EMBx) grading scale, 12 patients had grade 1R rejection, 2 patients had grade 2R rejection. 27 patients had no rejection. In Cardiac magnetic resonance imaging 14 patients had LGE in left ventricle and in this group, 2 patients had also LGE in right ventricle. Rejection in EMBx group and LGE positive group had no correlation ($p=0.879$). There was not any difference in left ventricular ejection fractions, pulmonary capillary wedge pressures, transpulmonary gradients, systolic pulmonary pressure values and cardiac ischemic time between groups. ($p=0.825$, $p=0.881$, $p=0.549$, $p=0.570$, $p=0.419$ respectively) LGE in myocardium could be due to edema, necrosis, and fibrosis resulting from previous rejection episodes so all patients were retrospectively searched for previous rejection grades and number of episodes. 38 of the 41 patients had one acute cellular rejection episodes, 35 of them had grade 1R, 24 of them had grade 2R and 3 of them had grade 3R rejection episodes in history but none of them had statistically significant correlation with LGE (for grade 1R $p=0.964$, grade 2R $p=0.591$, grade 3R $p=1$) Repeated rejection episodes may have role on development of fibrosis in myocardium. But there was not any correlation between number of rejection episodes and LGE (for grade 1R LGE -: 3.2 ± 2.8 episodes vs. LGE+: 3.6 ± 3 episodes $p=0.687$, grade 2R LGE -: 1.1 ± 1.3 episodes vs. LGE+: 2 ± 1.9 episodes $p=0.176$, grade 3R episodes LGE -: 0.03 ± 0.19 episodes vs. LGE+: 0.14 ± 0.36 episodes $p=0.229$).

Conclusion: Late gadolinium enhancement analysis of cardiac magnetic resonance imaging in heart transplant recipients is not suitable for monitoring acute cellular rejection. In addition, LGE is not correlated with previous rejection episodes.

Interventional Cardiology

OP-179

The Prognostic Value of Neopterin Concentration in Patients with Advanced Heart Failure

Şerafettin Demir¹, Murat Selçuk², Aydın Rodi Tosu³, Zeynep Karakaya¹, Vildan Yüksekdağ²

¹Adana State Hospital, Adana, ²Cukurova University, Adana, ³Van Education and Research Hospital, Van

Background: Serum levels of neopterin, an immune modulator secreted by activated macrophages. The relationship between neopterin and the risk of HF has yet to be