

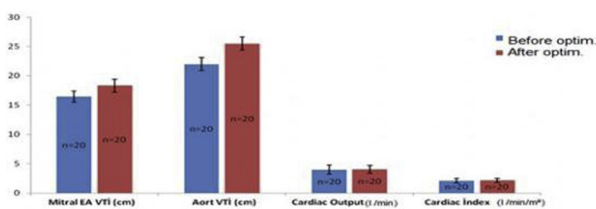
could be beneficial in evaluating the outcome of patients with heart failure.

■ OP-012

**Assessment of Av Interval Optimisation Results With Echocardiography and Impedance Cardiography in Patients with Biventricular Pacemaker.** *Idris Pektaş<sup>1</sup>, Dilek Çiçek Yılmaz<sup>1</sup>, Çağatay Han Türkseven<sup>2</sup>, Belgin Büyükkakill<sup>2</sup>.* <sup>1</sup>Department of Cardiology, Mersin University, Mersin, Turkey; <sup>2</sup>Department of Biophysics, Mersin University, Mersin, Turkey.

**Objective:** Cardiac resynchronization treatment (CRT) is a way of treatment which is recommended in the current guidelines for the patients in sinus rhythm whose survival for a year is expected and whose EF<35%, QRS duration ≥120 ms and who have LBBB morphology and also for the patients in sinus rhythm whose QRS duration ≥150 ms not withstanding the morphology. In many randomized controlled studies, although the rate of the treatment response is high, there is a patient group of 20-30% who do not respond to the treatment. As a result of small randomized uncontrolled studies made in these patients, biventricular pacemaker optimisation is recommended in guidelines. Although the best optimisation techniques are invasive techniques, non-invasive techniques are used (preferred) more on account of applicability and affordability. In our study, we made atrioventricular (AV) optimisation with echocardiographic techniques to the patients whom were applied CRT and we evaluated the hemodynamical changes occurred as a result of optimisation by means of impedance cardiography which is again a non-invasive technique. We aimed to search the benefit of the optimisation operation in patients with biventricular pacemaker.

**Methods-Results:** 10 male (50%) and 10 female (50%) patients (totally 20) who were implanted biventricular pacemaker were included in the study. There was ischemic cardiomyopathy diagnosis in 5 patients (25%) and non-ischemic cardiomyopathy diagnosis in 15 patients (75%). None of the patients were applied optimisation before. The average EF was % 42.25±10.75, the average QRS duration was 121.40±14.97 msn. We used Iterative technique, Mitral Inflow VTI and Aortic Valve VTI for optimisation. In the evaluation after optimisation, statistically significant increases were determined in Mitral Inflow VTI and Aortic Valve VTI determined with echocardiography. Although little increases were observed in cardiac output and cardiac indexes determined with impedance cardiography, statistically significant variation was not observed.



Assessment of mean measurements before and after optimisation

Optimisation	Before	After	P
Mitral EA VTI (cm)(n=20)	16.46 ± 0.94	18.32 ± 1.11	<0,001
Aort VTI (cm) (n=20)	22.00 ± 1.10	25.49 ± 1.11	<0,001
Cardiac output (l/min) (n=20)	4.00 ± 0.78	4.04 ± 0.67	0,89
Cardiac index (l/min/m²) (n=20)	2.11 ± 0.37	2.14 ± 0.32	0,82

**Conclusions:** Consequently, the necessity of AV optimisation in the patients who were implemented biventricular cardiac pacemaker is still a topic being discussed. In this study which is done with restricted patient group, we observed the increase seen in echocardiographic measurement has no influence on cardiac flow or cardiac index measured by impedance cardiography. It is necessary that this topic should be determined in further studies with invasive and non-invasive techniques in larger patient groups and its benefits should be discussed.

■ OP-014

**Epicardial Fat Thickness Is an Overlooked Predictor of Cachexia in Heart Failure.** *Mehmet Serkan Cetin<sup>1</sup>, Elif Hande Ozcan Cetin<sup>1</sup>, Ugur Canpolat<sup>2</sup>, Selahattin Aydin<sup>1</sup>, Yesim Akin<sup>1</sup>, Dursun Aras<sup>1</sup>, Ahmet Temizhan<sup>1</sup>, Sinan Aydogdu<sup>1</sup>.* <sup>1</sup>Department of Cardiology, Turkey Yuksek Ihtisas Training and Research Hospital, Ankara, Turkey; <sup>2</sup>Department of Cardiology, Hacettepe University, Ankara, Turkey.

**Objective:** Cachexia, as a miscellaneous phenomenon in heart failure (HF) with a prevalence of 10-15%, is associated with morbidity and mortality. Inflammation has been postulated as the hallmark factor in cachexia pathogenesis. Epicardial Fat Thickness (EFT) is the source of inflammatory mediators and has a close relationship with various cardiac diseases. Beyond other imaging modalities, echocardiography can be a simple and useful method in the evaluation of this tissue. In this study we objected to determine the relation of EFT and cardiac cachexia in heart failure

**Methods:** Our study consisted of totally 100 patients with heart failure with low ejection fraction (EF <30%) with BMI <25 kg/m2; 50 patients with cachectic HF and 50 patients with non-cachectic HF as the control group. The diagnosis of cachexia was based on the criteria as defined by Ewans WJ et al. (2008). EFT was measured with trans-thoracic echocardiography at systole in parasternal long axis view.

**Results:** In patients with cachectic HF (mean age 56.7±13.3, %44 male). EFT were higher than the control group (mean age 58.4±15.0, % 48 male).As a confounding factor; BMI was not different between groups (21.8±2.7 vs. 22.1±3.1, p=0.12). In correlation analysis of EFT with components of cachexia,EFT was significantly positively correlated with CRP (β=0.357 p<0.001) and negatively correlated with hand grip strength (β=-0.292, p=0.003), hemoglobin (β=-0.313 p=0.002) and albumin levels (β=-0.322 p=0.001). In multivariate analysis, EFT was an independent predictor of cardiac cachexia (OR:2.213, 95% CI:1.341-3.652, P=0.002).

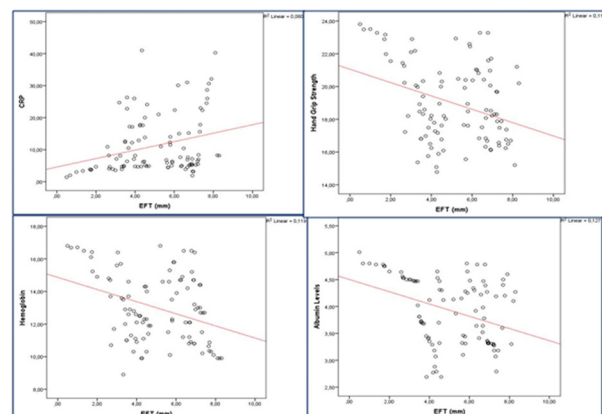


Figure 1.