

Demographics and laboratory findings of the DSE negative and positive patients.

Parameters	DSE negative (n=640) Mean±SD/ Median (IQR)	DSE positive (n=277) Mean±SD/ Median (IQR)	p value
Age (years)	58.9±9.9	60.5±9.6	0.03
Female gender n (%)	330 (51.6)	107 (38.6)	<0.001
BMI (kg/m ²)	28.3±3.2	28.4±3.3	0.77
Hypertension n (%)	155 (24.2)	102 (36.8)	0.01
Diabetes mellitus n (%)	176 (27.5)	87 (31.4)	0.26
Smoking n (%)	158 (24.7)	78 (28.1)	0.19
Family history n (%)	98 (15.3)	52 (18.8)	0.61
Known CAD n (%)	148 (23.1)	115 (41.5)	<0.01
Ejection Fraction (%)	58.9±5.8	57.4±7.7	0.02
Glucose (mg/dl)	118.3±41.7	120.9±45.5	0.41
Creatinine Clearance (ml/min)	94.4±23.1	94.6±22.1	0.92
Total Cholesterol (mg/dl)	196.9±39.7	185.7±41.2	<0.001
LDL-C (mg/dl)	124.4±33.8	118.3±33.5	0.02
HDL-C	40.6±11.1	37.5±10.4	0.03
Triglyceride (mg/dl)	131 (97)	127 (96)	0.09
Hemoglobin (g/dl)	14.0±1.1	14.1±1.0	0.44
Hematocrit (%)	42.2±3.7	42.2±3.8	0.89
WBC (x1000 ³ /L)	7.2±1.6	7.6±1.7	<0.001
RDW (%)	12.7±1.3	13.5±1.5	<0.001

DSE: Dobutamine stress echocardiography, IQR: Interquartile range, BMI: Body mass index, BP: Blood pressure, CAD: Coronary artery disease, PCI: Percutaneous coronary intervention, CABG: coronary artery bypass grafting, MI: Myocardial infarction, LDL-C: Low-density lipoprotein cholesterol, HDL-C: High-density lipoprotein cholesterol, WBC: White blood cell, RDW: Red blood cell distribution with

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Subclinical Left Ventricular Systolic Dysfunction in Patients with Systemic Lupus Erythematosus: A Speckle Tracking and Real Time Three Dimensional Echocardiographic Study

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Background: Systemic lupus erythematosus (SLE) is associated with high cardiovascular mortality. We aimed to evaluate subclinical left ventricular (LV) systolic dysfunction in patients with SLE, without any cardiovascular disease and with normal LV ejection fraction (EF), by using a strain imaging method, "speckle tracking echocardiography" (STE). We also performed a real time three dimensional (3D) echocardiography in order to demonstrate LV volumetric analysis.

Methods: We studied 32 patients with SLE and 20 age and sex-matched controls, without any cardiac disease and with preserved LV EF. Conventional echocardiography, real time 3D echocardiography and STE-based strain imaging were performed to analyze subclinical LV systolic function.

Results: Conventional echocardiographic measurements (LV end diastolic diameter, LV end systolic diameter and LV EF) were similar between the groups. Additionally, LV end-diastolic volume (LV EDV) (100±16.98 ml to 105±20.06 ml, p=0.37) and end-systolic volume (LV ESV) (37.13±8.10 ml to 37.47±5.43 ml, p=0.83) measurements by 3D echocardiographic analysis were similar between the patients and the healthy controls. LV longitudinal peak systolic strain (13.42±1.93 % to 17.60±2.18 %, p=0.0001) and strain rate (0.85±0.28 1/s to 1.35±0.29 1/s, p=0.0001) were significantly impaired in patients with SLE, compared to controls, demonstrating subclinical ventricular systolic dysfunction.

Conclusions: Real time 3D echocardiography is a new promising modality allowing for accurate measurement of LV volumetric analysis. Strain imaging-based novel echocardiographic techniques may provide additional data for detecting early deterioration in ventricular systolic function in patients with SLE.

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Effects of Pulmonary Endarterectomy on Echocardiographic Parameters and 6-MWT in Patients with Pulmonary Endarterectomy

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Chronic thromboembolic pulmonary hypertension (CTEPH) developed recurrent thromboembolism as a result of structural changes in the pulmonary vascular bed

occurs. This growing with the increase in pulmonary artery pressure and vascular resistance changes in pressure depending on the load, resulting in right heart failure. Morbidity and mortality is high and it is a progressive disease of acquired cardio-pulmonary vascular bed.

Successful pulmonary thromboendarterectomy (PEA) definitive treatment of the disease process. This process short-and long-term pulmonary vascular bed, and right ventricular echocardiographic and hemodynamic benefit has been shown that. The treatment of patients with pulmonary hypertension clinic to evaluate the response of a 6-minute walk test (6MWT) for many years, are used. PEA is carried out in this study of patients with CTEPH echocardiography before and after surgery and within walking distance to 6th month 6MWT tests with the changes and echocardiographic parameters investigated the correlation. Our investigation, 30 patients admitted to the Marmara University of Thoracic Surgery were included, between 2009 and 2011. After PEA results of the study, a significant increase in 6-MWT (242.8 ± 112.8 vs 423.6 ± 89.1 meters, p < 0.001). End of the test borg fatigue and dyspnea scores decreased from 6±2 to 4±2 (p<0.001) and 7±2 to 4±2 (p<0.001). And the end of the test oxygen saturation increased from 88±6 to 91±3(p=0.02).Systolic pulmonary artery pressure (SPAP) and right ventricular (RV) diameter, a significant decrease (86 ± 25.1 mm Hg vs 41.9 ± 15.6 mmHg, p < 0.001 and 42.1 ± 10.1 mm vs 35.3 ± 5.6 mm, p<0.001). Degree of change in the meaning of the other parameters were not observed. However, with the change in 6-MWT deviation of tricuspid annular systolic (TAPSE) was considered statistically significant change in (r: 0.52, p=0.004).

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Relation of Fragmented QRS to Tissue Doppler-Derived Parameters in Patients with Familial Mediterranean Fever

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Purpose: Familial Mediterranean fever (FMF) may pose a risk for cardiovascular diseases due to continuous inflammatory status observed during the course of the disease. Recently, the presence of fragmented QRS (fQRS) has been recognized as a predictor of myocardial fibrosis. In this study, we aim to investigate the frequency of fQRS and its relation to Doppler-based indices.

Methods: This study consisted of FMF patients (n=80; mean age, 29±12 years) and healthy controls (n=30; mean age, 29±15 years). FMF diagnosis was achieved according to the Tell-Hashomer criteria. fQRS pattern was defined as the presence of additional R waves or RSR', evidenced by notched R or S wave on ECG. The patient and the control groups underwent conventional echocardiography and tissue Doppler echocardiography.

Results: In comparison to the control group, FMF patients exhibited a statistically higher frequency of fQRS (p<0.01). E/Em ratio showed a statistically significant increase in the FMF group with fQRS (p<0.01), while the mean Em value was markedly lower (p<0.01).

Conclusions: FMF patients displayed a statistically significant increases in frequency of fQRS. Doppler-derived diastolic index was statistically significantly impaired in FMF patients with fQRS as compared to the patients without fQRS. In conclusion, fQRS can be recognized as a new non-invasive marker for cardiac involvement in FMF patients.

Pacemaker

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Comparison of Inflammatory Markers and in Hospital Clinical Course In Patients with Lead versus Non-lead Left Sided Endocarditis

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Objectives: We aimed to compare inflammatory markers and in hospital clinical course in patients with lead versus non-lead left sided endocarditis which has not been reported previously.

Methods: One hundred seventy three consecutive infective endocarditis patients with a mean age of 48.5 ± 18,2 (range between 10-89; 99 male, 74 female) were included into the study. Patients were divided into two groups according to endocarditis type (group 1, lead endocarditis, n=17 and group 2, non-lead left sided endocarditis,