pits with (3/26, 11%) and without (6/78, 8%) recent history of acute lung edema, in those awaiting bypass surgery (5/38, 13%) and in those in NYHA class III (4/42, 9%). By contrast, it was more likely to occur in the presence of 6/31, 19% than in the absence (3/73, 4%, p=0.015) of ExE-induced wall motion abnormalities.

**Conclusion:** During exercise, significant worsening of MR is rare and only correlates with the presence of exercise-induced ischemia. Given the low prevalence of ExE-induced worsening of MR in pts with LV ischemic dysfunction, it does not seem appropriate to recommend a widespread use of ExE in this population.

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Longitudinal myocardial strain in right ventricular wall reduced by pilsicainide challenge in patients with Brugada type ECG and positive response by PIL challenge in patients with Brugada type ECG and positive response.

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**Background:** Tissue Doppler imaging revealed that pure sodium channel blocker, pilsicainide (PIL) provoked right ventricular activation delay in Brugada type ECG patients. However, the effect of PIL on regional myocardial systolic function in Brugada syndrome is unknown.

**Method:** Thirty patients with Brugada type ECG were studied. PIL was infused (1 mg/kg; i.v. over 10 minutes) to provoke a ECG response. Before and after PIL, apical 4-chamber view was recorded. Two dimensional (2D) strain imaging based on speckle tracking technique was used to obtain longitudinal myocardial strain (%) at both the base of interventricular septum (IVS) and right ventricular free wall (RV).

**Results:** Patients were subdivided into three groups according to their ECG response. Nine of 30 patients had persistent coved type ST-elevation (baseline (E velocity, A velocity, DT and IVRT) and mitral annular parameters (E’ and A’ velocity) were measured. Echo-Doppler transmitral parameters (E/A, E'/A') and sex, were studied. Stress echocardiography was performed to measure diastolic function during exercise in patients with dilated cardiomyopathy (DCM). As such, and since cardio-pulmonary exercise testing (CPET) is not widely available, stress echocardiography has been proposed as an alternative to CPET. Side effects (flushing, nausea, hypotension) during dobutamine infusion are not uncommon and sometimes require the termination of the dobutamine stress test. Exercise-induced stress is more physiologic and could be better tolerated than dobutamine stress. To test if treadmill EE could be a valuable tool for inotropic reserve assessment in dilated cardiomyopathy, correlating well with CPET.

**Method:** A total of 16 pts with clinical diagnosis of DCM (aged 58±9.9 years; 14 males). All pts underwent a complete Doppler echocardiographic evaluation and left ventricular ejection fraction (LVEF), LV outflow tract velocity time integral (VTI), systolic volume (SV) and cardiac output (CO). SV was again calculated in upright position (UP) before exercise was started. Symptom-limited CPET was started and oxygen uptake, initial O2 pulse (VO2/H), maximal oxygen uptake (VO2max) and maximal O2 pulse (VO2max/H) were determined. SV and CO were calculated, during CPET, at the first stage (1S) of the modified Bruce protocol and again at peak exertion (PE).

**Results:** Mean ejection fraction for the 16 pts was 26±6.4%. 13 pts were in normal sinus rhythm and 3 in atrial fibrillation. EE during CPET was feasible in every pt. There was a significant correlation between LLD SV and VO2/H, r = 0.687 and p = 0.003; between UP SV and VO2/H, r = 0.736 and p = 0.001; between PE SV and VO2max/H, r = 0.763 and p = 0.001; between PE CO and VO2max/H, r = 0.541 and p = 0.03; between PE SV and VO2max, r = 0.547 and p = 0.028; and between PE CO and VO2max, r = 0.632 and p = 0.009.

**Conclusions:** 1. Treadmill Exercise Echo for evaluation of left ventricular function parameters such as SV and CO is feasible during CPET, and presents good correlation with CPET. 2. Our experience allows us to suggest that Exercise Echo might be considered as an alternative to CPET in the assessment of DCM pts.

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Evaluation of coronary flow reserve in young adults with renal transplant.

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**Background:** Cardiovascular disease is the main cause of death and transplant lung in transplant recipients (RTR). End-stage renal disease, diastolic and immunosuppressive therapy after transplant are able to accelerate the development of vascular injury. In RTR older than 50 years, severe atherosclerotic lesions are frequently detectable in asymptomatic subjects. Since there are no data about the prevalence of vascular damage in young adult RTR, it is of utmost importance to evaluate the coronary flow reserve (CFR) in asymptomatic young RTR.

**Methods:** 25 young adult RTR (12 M, 13 F, aged 26±6.9 years, follow-up after transplant 89.4±27.2 months) and 17 healthy controls, matched for age and sex, were studied. Stress echo-cardiography was performed to measure the coronary blood flow velocity in the left descending coronary artery (LAD) at rest and after dipyridamole (0.56 mg/kg + 0.28 mg/kg in 6’) and to evaluate CFR and wall-motion analysis. The assessment of CFR has proven to be useful to detect epicardial coronary artery disease as well as impaired microcirculation. We considered CFR >3 as normal.

**Results:** The Table 1 shows clinical characteristics of the RTR group. In young adults with renal transplant, routine echocardiography showed normal left ventricular thickness and function (EF 62±8%); stress echocardiography was negative for wall motion criteria. Mean basal diastolic flow velocity was higher in RTR compared to controls (respectively, 28.2±8.1 cm/sec vs 23.4±4.7 cm/sec, p=0.05); meanwhile mean CFR was reduced (2.8±0.6 vs 3.3±0.4, p<0.05).

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Eur J Echocardiography Abstracts Supplement, December 2006