AD Popovic Cardiovascular Research Center, Belgrade, Serbia and Montenegro; analysis identified 7 ULCs as the best diagnostic cut-off to separate cardiogenic and non-cardiogenic dyspnea (Figure) with 90% sensitivity and 67% specificity.

Methods: ULCs were determined from non-cardiogenic dyspnea (Post LV injection in LVEF was >5%). Patients were followed for five years for cardiac death. The IVRT = 77 ms predicted pulmonary artery systolic pressure (P<0.0001).

Results: A total of 27 (45.8%) patients died during the follow-up. According to Kroczyński-Mier analysis preserved LVCR assessed either quantitatively or semiquantitavely identified patients with more favorable prognosis. However, the separation was the best when LVCR was assessed semiquantitavely by DSE expert and experienced reader (0.93 and 1.99, respectively; p<0.001 for both), followed by quantitative assessment (log rank 9.78, p<0.0018) and assessment by novice reader (log rank 8.76, p=0.012). Kaplan- Meier analysis revealed a positive change for drainage induced change in LVEF between quantitative and semiquantitative method was significant for a 0.34, 0.47 and 0.83 for novice and experienced readers and DSE expert, respectively. Differences were not significant.

Conclusions: Our data demonstrate that semiquantitative assessment of LVCR has superior prognostic significance to quantitative approach assessed by experts. On the other hand, accuracy of semiquantitative assessment of LVCR is low, if not assessed by DSE expert.

276 Ultrasound lung comet as a bedside sign of cardiogenic dyspnea
L. Gargan, 1 F. Frasal, 1 S. Giglouva, 1 M. Dragan, 2 E. Poggiani, 1 M. Emrini, 1 G. Mottola, 2 E. Picano, 3 CNR Institute of Clinical Physiology, Pisa, Italy; 2Casa di Cura "Montevergine", Mercogliano, Italy; 3Director Echocardiography and Stress Echo Lab, Sanier Med. Researcher National Res. Council, Pisa, Italy

Background: Ultrasound lung comet (ULC) is a simple sign of extra-vascular lung water generated by water-bricken pleural interlobular septa. Differentiating congestive heart failure from non-cardiogenic causes of dyspnea is very important for patients presenting in the emergency department with acute dyspnea.

Aim: To assess whether ULC could differentiate cardiac from non-cardiac causes of dyspnea.

Methods: ULC was assessed by commercially available echocardiographic instrument (standard in 25, portable unit in 28) in 53 patients (22 females, age 71±13 yrs) presenting to the emergency department with acute dyspnea. The accuracy of the method for etiologic diagnosis was compared on the basis of the final diagnosis established by physicians who were blinded to ULC findings.

Results: ULC assessment could be obtained in all patients (sensitivity 100%). The imaging and analysis time was always <2'. ULC were 33±25 in the 41 patients with cardiogenic and 16±22 in the 12 with pneumogenic dyspnea (p<0.05). A ROC analysis identified 7 ULCs as the best diagnostic cut-off to separate cardiogenic from non-cardiogenic dyspnea (Figure) with 90% sensitivity and 67% specificity.

Conclusions: Ultrasound lung comet may provide a quick bedside test to separate cardiogenic from non-cardiogenic dyspnea in patients presenting to the emergency department with acute dyspnea. The method is quick and easy to assess and the results are easy to interpret.

277 Effect of rate versus rhythm control strategy on left ventricular function in patients with persistent atrial fibrillation, one-year follow-up
M. Szuk, 1 D. Koscielny, 2 M. Zawadzka, 1 M. Pierscionek, 1 P. Kolodziejczak, 1 B. Wzórska-Kaplon, 3 G. Górecki, 1 A. Torbicki 1 Medical University of Warsaw, Dept of Int Med, Hypertension and Cardiology, Warsaw, Poland; 2Institute of Clinical Physiology, Pisa, Italy; 3Director Echocardiography and Stress Echo Lab, Sanier Med. Researcher National Res. Council, Pisa, Italy

Objectives: We examined baseline characteristics and outcomes associated with new atrial fibrillation (AF) in the setting of acute myocardial infarction (AMI) in patients under 65 years.

Methods: We examined 320 patients under 65 years of age with AMI, comparing patients with AF (n=114) to those without (n=206). Univariate and multivariate analysis were used to assess relation between baseline factors and development of atrial fibrillation. Correlation analysis through Pearson coefficient was performed to determine relation between clinical parameters and left ventricular ejection fraction (LVEF).

Results: Patients with AF had more often anterior Q wave MI, higher peak creatine kinase (CK) levels, more advanced heart failure (HF) as well as more extensive LV systolic dysfunction. They were also more likely to have had a history of diabetes mellitus and previous angina pectoris. Significant multivariable predictor of AF was worse Killip class. Lower LVEF highly correlated with previous MI (p<0.0001), anterior MI (p<0.0001), congestive HF (p=0.0001), CK levels (p=0.001) and risk for development of AF (p=0.001). The unadjusted in-hospital mortality rate was significantly higher in patients with AF (14%) than in patients without AF (6.8%), p=0.03. After adjustment for baseline characteristics, the presence of HF (odds ratio [OR]=4.7) was associated with increased in-hospital mortality. The unadjusted mortality rate was significantly higher at 7 year (36.1% vs. 18.8%, p<0.001) in patients with AF. The adjusted 7 year mortality rate remained significantly higher with HF (ORs=3.3).

Conclusion: HF in AMI complicated by AF independently predicts in-hospital and long term mortality in patients under 65 years, and not the AF.

278 Impact of rate versus rhythm control strategy on left ventricle function in patients with persistent atrial fibrillation, one-year follow-up
M. Szuk, 1 D. Koscielny, 2 M. Zawadzka, 1 M. Pierscionek, 1 P. Kolodziejczak, 1 B. Wzórska-Kaplon, 3 G. Górecki, 1 A. Torbicki 1 Medical University of Warsaw, Dept of Int Med, Hypertension and Cardiology, Warsaw, Poland; 2Institute of Clinical Physiology, Pisa, Italy; 3Director Echocardiography and Stress Echo Lab, Sanier Med. Researcher National Res. Council, Pisa, Italy

Objective: We examined baseline characteristics and outcomes associated with new atrial fibrillation (AF) in the setting of acute myocardial infarction (AMI) in patients under 65 years.

Methods: We examined 320 patients under 65 years of age with AMI, comparing patients with AF (n=114) to those without (n=206). Univariate and multivariate analysis were used to assess relation between baseline factors and development of atrial fibrillation. Correlation analysis through Pearson coefficient was performed to determine relation between clinical parameters and left ventricular ejection fraction (LVEF).

Results: Patients with AF had more often anterior Q wave MI, higher peak creatine kinase (CK) levels, more advanced heart failure (HF) as well as more extensive LV systolic dysfunction. They were also more likely to have had a history of diabetes mellitus and previous angina pectoris. Significant multivariable predictor of AF was worse Killip class. Lower LVEF highly correlated with previous MI (p<0.0001), anterior MI (p<0.0001), congestive HF (p=0.0001), CK levels (p=0.001) and risk for development of AF (p=0.001). The unadjusted in-hospital mortality rate was significantly higher in patients with AF (14%) than in patients without AF (6.8%), p=0.03. After adjustment for baseline characteristics, the presence of HF (odds ratio [OR]=4.7) was associated with increased in-hospital mortality. The unadjusted mortality rate was significantly higher at 7 year (36.1% vs. 18.8%, p<0.001) in patients with AF. The adjusted 7 year mortality rate remained significantly higher with HF (ORs=3.3).

Conclusion: HF in AMI complicated by AF independently predicts in-hospital and long term mortality in patients under 65 years, and not the AF.