Abstract: P2068

Clinical and echocardiographic features in diabetic and non-diabetic patients with chronic heart failure

Authors:
V Berisha-Muharremi¹, E Haliti¹, S Elezi¹, I Bytyci¹, A Poniku¹, A Ahmeti¹, A Batalli¹, P Ibrahimi¹, R Tafarshiku¹, Z Rexhaï¹, G Bajraktari¹, ¹University Clinical Centre of Kosova (UCC), Service of Cardiology - Pristina - Kosovo Republic of,

Topic(s): Chronic Heart Failure - Clinical

Citation:
Background and Aim: Heart failure is a common cardiovascular complication of diabetes mellitus (DM) and these two diseases often co-exist. The aim of this study was to investigate the clinical characteristics and echocardiographic indices in diabetic and non-diabetic patients with chronic HF.

Methods: In 344 included chronic HF patients (mean age 61 ± 10 years, 54% female), clinical, biochemical and antropometric data were registered. In all study patients an echo-Doppler study and a six-minute walk test (6-MWT) were performed in the same day.

Results: Among 344 HF patients 111 (32%) had DM. Diabetic patients were older (p=0.026), had greater waist-hip ratio (p=0.041), had more compromised renal function (increased levels of urea and creatinine [p=0.003 and p=0.008, respectively]) and lower hemoglobin level (p=0.02), compared with non-diabetic patients with HF. All echo-Doppler indices, including tissue Doppler measurements, did not differ between diabetics and non-diabetics. On the other hand, diabetic patients with HF had higher New York Hear Association functional class (p=0.008) and shorter walking distance at 6-MWT (p<0.001), compared to non-diabetic patients with HF.

Conclusion: The prevalence of DM in HF patients is high. Diabetes mellitus has deleterious on renal function and anemia in HF patients. Diabetic patients with HF are also more symptomatic and have more compromised exercise capacity, irrespective of structural and functional heart changes, compared to non-diabetic patients with HF. These findings highlight the need for better optimization of medical therapy and regular exercise in diabetic patients with chronic HF.