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Extended abstract

Contributing factors in heart failure development-results from CRO-HF Registry

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Introduction There are many causes of heart failure (HF), and these vary in different populations. The aim of the study was to analyse the contributing factors in heart failure development.

Methods We analyzed the results from CRO-HF Registry [1,2]. This on-line registry was established in 2005.

Results A total of 2203 in-hospital HF patients from CROHF Registry were analyzed: 1,028 (46.7%) females (F) and 1,175 (53.3%) males (M); median age was 76 years. Preserved left ventricular systolic function (LVEF 50%) was recorded in 37.8% patients.

History of arterial hypertension was recorded in 67.5% patients, diabetes mellitus in 34.4%, myocardial infarction in 22.7%, renal insufficiency in 19.2%, chronic obstructive pulmonary disease (COPD) in 17.3%, and cerebrovascular disease in 16.5% patients. Atrial fibrillation or undulation was noted in 53.7% patients. Active smoking habit was recorded in 11.1% patients and 15.6% patients were former smokers. Overweight was recorded in 46.3% patients and obesity in 25%.

The frequent precipitating factors of HF were arterial hypertension (55.5% patients), arrhythmias (51.3%), valvular heart disease (32.8%), acute coronary sindrome (19.7%), and infections (19.6%).

Lower levels of haemoglobin was recorded in 51.9% patients, higher levels of creatinine in 46.8%, ALT in 29.8%, cholesterol in 32.7%, tryglicerides in 31.9%, uric acid in 79.3% and hyperglycaemia in 99.8% patients. Females had higher values of ALT (F-33%, M-27%, P=0.012), cholesterol (F-36.8%, M-29.1%, P=0.009), tryglicerides (F-36.1%, M-28.3%, P=0.014), and uric acid (F-82.9%, M-76.4%, P=0.007). Opposite to expectation, males had lower haemoglobin levels (M-58%, F-44.8%, P 0.001).

In-hospital mortality rate was 13.8%.

Conclusion The considerable underlaing diseases of HF were hypertension, diabetes mellitus, myocardial infarction, renal insufficiency and COPD. one-third of HF patients were smokers (active or former) and two-third of them were overweight or obese. Hypertension was the most important “trigger” of our HF patients, close to arrhythmia, ACS, and infections.

Keywords Heart failure • Risk factors • Croatia

Literature

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