**Abstract**

**Introduction:** Hypertension is the civilization disease. It is also one of the main risk factors of cardiovascular diseases development, that is coronary artery disease and heart failure.

**Material and methods:** Hospitalized hypertensive patients were analyzed retrospectively in a tertiary care cardiology centre in 2009–2010. Clinical data depending on gender have been analyzed with particular reference to concomitant diseases and selected biochemical and echocardiographic parameters.

**Results:** We analyzed data of 1372 men (54.6%) and 1140 women (45.4%). Mean age of women group was 70.8 years (range from 33 to 95 years), mean age of men group was 66.2 years (range from 25 to 94 years). Diabetes mellitus (28.6v.22.6%; p=0,008), paroxysmal atrial fibrillation (14.8% v.10.6%; p=0,0055), hypothyreosis (5% v. 1.2%; p<0,0001), chronic kidney disease stage 3 (68.9v.48.8%; p<0,0001), preserved systolic left ventricular function (67.5% v.53.5%; p=0,003) were more frequent in women group. Complications of hypertension, such as left ventricular hypertrophy (34.3 v.28.8%; p=0,03), previous myocardial infarction (11.2% v. 7%; p=0,0007), severe left ventricular disfunction (18.2% v.10.3%; p<0,0001), hyperuricaemia (54.3 v.44.3%; p=0,0022) were observed in men group more often. Hospitalized hypertensive men have been stayed longer in chronic kidney disease stages 1 and 2 (4.8% v.0.4%; p=0,047 and 42.6% v.22.6%; p=0,072).

**Conclusions:** Women are under influence of female sex hormones, which are protective for cardiovascular system. In conjunction with age and the loss of sex glands function frequency of hypertension has been intensified in women population. Differences between hospitalized women and men were proved in presented study.