## Biljana Obrenović-Kirćanski, Siniša Dimković

## GLOBAL ATTEND OF THE TREATMENT OF ARTERIAL HYPERTENSION

Abstract: Arterial hypertension is the most frequent noninfective disease nowadays and one of the most important cardiovascular risk factors. The risk of cardiovascular events is determined by the level of blood pressure and presence or absence of other risk factors.

The aim of the treatment of arterial hypertension is decreasing the risk of cardiovascular morbidity and mortality by reducing the blood pressure to the level less than 140/90mmHg and in patients with diabetes mellitus to the level less than 130/90mmHg.

Non-pharmacological therapy is always inculuded in the treatment of arterial hypertension, i.e. weight reduction, increased physical exercise, dietary measures (sodium restriction, increased comsuption of fruit, vegetables and potasium and magnesium).

Pharmacological therapy should be started gradualy with a low dose of a single agent and target blood pressure values achieved progressively. According to the baseline blood pressure and the presence or absence of complications therapy should initiate with a low dose of a single agent or with a low-dose combination of two agents. The major classes of antihypertensive agents – diuretics, beta blockers, calcium antagonists, ACE inhibitors, angiotensin receptor antagonists are suitable for the initiation and maintance of therapy. The choice of drug is influenced by many factors: presence or absence of target organ damage, clinical cardiovascular or renal disease or diabetes, risk profile, the presence of other coexisting disorders that may either favour or limit the use of particular classes of antihypertensive drugs, possibly interactions of drugs, the cost of drugs etc. Therapy should be tailored to each patient per se.

Advantages of using the combination therapy are: 1) by using two drugs with different mechanism of action it is more likely that blood pressure is controlled, 2) by using combinations both the first and the second drugs can be given in the lower dose range that is more likely to be free of side effects, 3) fixed low-dose combinations may optimize compliance.

Arterial hypertension and hypothyreosis

Hypothereosis is present in 1-2% of eldery patients with hypertension. One third of patients will normalize high blood pressure by regulating hypothyreosis. If medical therapy is necessary, ACE inhibitors and angiotensin receptor antagonists (without effect on heart rate) may have favorably effect.