Branislava Ivanović, D.Kalimanovska-Oštrić,D. Matić et.al:

HYPERTENSIVE CRISIS AND MALIGNANT-ACCELERATED HYPERTENSION

Hypertensive crisis is a rare condition with clinical incresed blood pressure (>210/120<196>140 mmHg) and evidence of new or progressive severe end-organ damage (heart, brain, kidney). Hypertensive crises are most commonly seen in patients with essential hypertension. It is unknown why a patient with hypertension suddenly develops a hypertensive crisis, but the renin-angiotension system seems to play an important role. If untreated, the disease will lead to irreversible end-organ damage. The goal of treatment is to limit the progression of end-organ damage. The blood pressure should be reduced gradually. It should not be normalized, but a reduction in mean arterial pressure of 20<196>25% or to a diastolic blood pressure to 100<196>110 mmHg should be achieved. Rapid reduction of blood pressure additionally carries a considerable risk, if it is performed in an uncontrolled manner, leading to further end-organ damage. The choice of the drug should be made on the basis of its pharmacodynamic properties, clinical effects, advantages and contraindications. Several potent antihypertensive drugs, such as sodium nitroprusside, labetalol and urapidil, are available to produce an immediate fall in blood pressure with minimal adverse effects while preserving organ function.
The term accelerated-malignant hypertension is used when there is transition of the elevated blood pressure into a serious and potentially life-threatening phase of severe hypertension. Any form of hypertension may progress to the accelerated-malignant phase. Patients with malignant hypertension have severe blood pressure elevation often in the range of the 250/140 mmHg. The level of the arterial pressure correlates closely with the development of vascular structural changes. Examination o the vasculature reveals myointimal hyperplasia. The vascular damage causes perfusion disturbance in the kidney, in the heart and across the cerebral circulation. Retinal hemorrhages and papilledema are observed on fundoscopy. Symptoms such as headache, blurred vision, impairment of neurogical functions and nasal bleeding are common. If untreated, the prognosis is grave. With modern treatment which initially often requires intensive care unit admission the 5 years survival rate has improved from 50 to 75% during last decade.

Key words: crisis hypertensiva, accelerated-malignant hypertension