

Daily monitoring of arterial pressure as a method of early diagnosis of arterial hypertension in young patients.

Tetiana A. Ivanytska, Yuriy H. Burmak, Yevhenii Y. Petrov, Svitlana I. Treumova, Ihor V. Ivanytskyi

HSEE of Ukraine “Ukrainian Medical Stomatological Academy”

**Introduction.** Arterial hypertension (AH) is a major risk factor for cardiovascular morbidity and mortality in the world. The morbidity on the arterial hypertension has the tendency to the increased during the last years. European society of hypertension practice guidelines for ambulatory blood pressure monitoring, define that hypertension is diagnosed when a 24-h ABP > 130/80 mmHg, awake ABP > 135/85 mmHg and/or sleep ABP > 120/70 mmHg. Home blood pressure monitoring is a good method for assessing long-term variability in blood pressure. Recent studies showed that twenty-four-hour ambulatory BP monitoring (ABPM) is more accurate than office BP measurements in predicting cardiovascular morbidity and mortality

The aim of our study was to determine the possibility of daily monitoring of blood pressure in ambulatory patients of young age (25 to 30 years) who had elevation of blood pressure 135-140 / 90-95 mm Hg in clinic.

**Material and methods.** We examined 63 patients from an average age of  $24.3 \pm 4.3$  years, 41 patients were male, 22 female. The BP reception were  $134.5 \pm 4.7$  mm Hg. for systolic and  $93.2 \pm 2.2$  for diastolic blood pressure.

**Results.** After 24 hours of monitoring, it was found that 34 (53.9%) patients had a time index of  $31.5 \pm 2.4$ , of which 11 (17.5%) belonged to the category of non dippers. Night-picker

included 9 (14,3%), the category Dipper included 6 (9,5%),the category Over-dipper included 8 (12,6%) patients.

Conclusions. Thus, it can be concluded that daily monitoring of blood pressure is a highly sensitive method that allows diagnosing arterial hypertension in young patients in the early stages. It should be noted that the majority of patients with arterial hypertension had pathological daily profiles, which indicates an unfavorable prognosis and it needs for more careful management of such patients. It seems that we should change our traditional practice to diagnose and manage BP according to office measurements and more broadly use 24-h ABPM, particularly in young patients, to optimize BP control.

Key words: arterial hypertension, 24-hour blood pressure monitoring, young age.