

Sequential Ambulatory Blood Pressure Monitoring (ABPM) for Evaluation of Arterial Hypertension

Lisa N. Blum¹, Jerome Marcusohn², Daniel Kushnir²⁻³, Victor Frajewicki²⁻³

¹Clalit Health System, ²Department of Nephrology and Hypertension- Carmel Medical Center, ³Faculty of Medicine, Technion - Israel Institute of Technology, **HAIFA, ISRAEL**

INTRODUCTION

- Being one of the most widely prevalent diseases throughout the world, hypertension has emerged as one of the leading causes of global premature morbidity and mortality.
- Indeed, arterial hypertension is the most important contributor to the global burden of disease; however, disease control remains poor.
- Hence, blood pressure (BP) measurements are essential for physicians in the diagnosis and management of hypertension.
- Ambulatory blood pressure monitoring (ABPM) is considered a good intervention strategy to avoid misdiagnosis of hypertension and allow for targeted treatment of patients with hypertension. This technique is particularly useful for detection of white coat, masked and resistant hypertension.
- ▶ The aim of the study was to evaluate the BP control by the use of at least two ABPM studies in the setting of outpatient clinic.

METHODS

Retrospective study which included the files of all patients who did 2 ABPM tests between 1.1.2018-31.12.2021 followed at a Nephrology out-clinics in the Haifa Area (Israel).

RESULTS

- A total of 293 patients had 2 ABPM studies.
- According to the age distribution, most of the patients were aged 71 to 80 years.
- ▶ The most common indication for ABPM was hypertension control monitoring.
- The first ABPM showed an uncontrolled test in 67% of patients. In 39 percent of patients who were not well controlled in the first ABPM showed a controlled test in the second one.
- Ninety four percent of patients had a serum creatinine level less than 1.5 mg/dl.
- There was no correlation between serum creatinine levels and BP.
- In 40% of patients a BMI of more than 30 was recorded.
- A high percentage (68%) of non-dipper referred for sleep testing were found to have sleep apnea syndrome.
- In 8.5% of patients the second examination was performed while the use of BPAP.
- Files revealed that there were no real time recommendations based on the ABPM results or mention of the results in a quarter of both tests.
 - Even ABPM is considered a useful tool for hypertension evaluation and treatment, most of patients still have higher BP than the recommended values.
 - The exact role of classic ABPM technology has to be reassessed.