PMD12

AMBULATORY BLOOD PRESSURE MONITORING IN THE DIAGNOSIS AND MANAGEMENT OF ARTERIAL HYPERTENSION IN CURRENT MEDICAL PRACTICE IN ALGERIA: MAPA DZ STUDY - INTERIM ANALYSIS

Hammoudi N¹, Manamani L², Meziane-Tani A³, Cherif A⁴, Courouve L⁵, Mahi L⁶, Benkhedda S⁷

¹ CNMS – Alger; ² CHU Annaba – Annaba; ³ CHU de Tlemcen; ⁴ Merinal Laboratoires – Alger; ⁵ Cemka-Eval – Bourg-La-Reine (France); ⁶ Axelys Santé DZ – Alger; ⁷CHU Mustapha – Alger.

BACKGROUND

Hypertension (HT) is a major factor in morbidity and mortality in cardiovascular diseases. It is the leading cause of death in the world. (1).

In 2016 the population in Algeria growth up to 40 million (WHO). Cardiovascular (CV) disease account for 41% of causes of death, while in 2011 they represented 28%. The prevalence of HT is high and is estimated to 35% (2-3).

ABPM (Ambulatory Blood Pressure Monitoring) is important for improving the diagnosis and management of HT as recommended by the NICE 2011; It also makes it possible to better adapt the treatment over time (chronotherapy), to better know the effect of the different molecules, and not to treat the patients with white coat effect unnecessarily (4). Taking into account all these data and the potential evolutions, it seemed interesting to us to describe the contribution of ABPM in the diagnosis and management of HT in current medical practice in Algeria.

OBJECTIVES

ABPM is a useful way of guiding therapeutic and clinical decisions in the management of HT.

The objective of this study was to evaluate, in current medical practices the use of ABPM in the management of HT in Algeria, in both public and private cardiology settings.

PATIENTS & METHODS

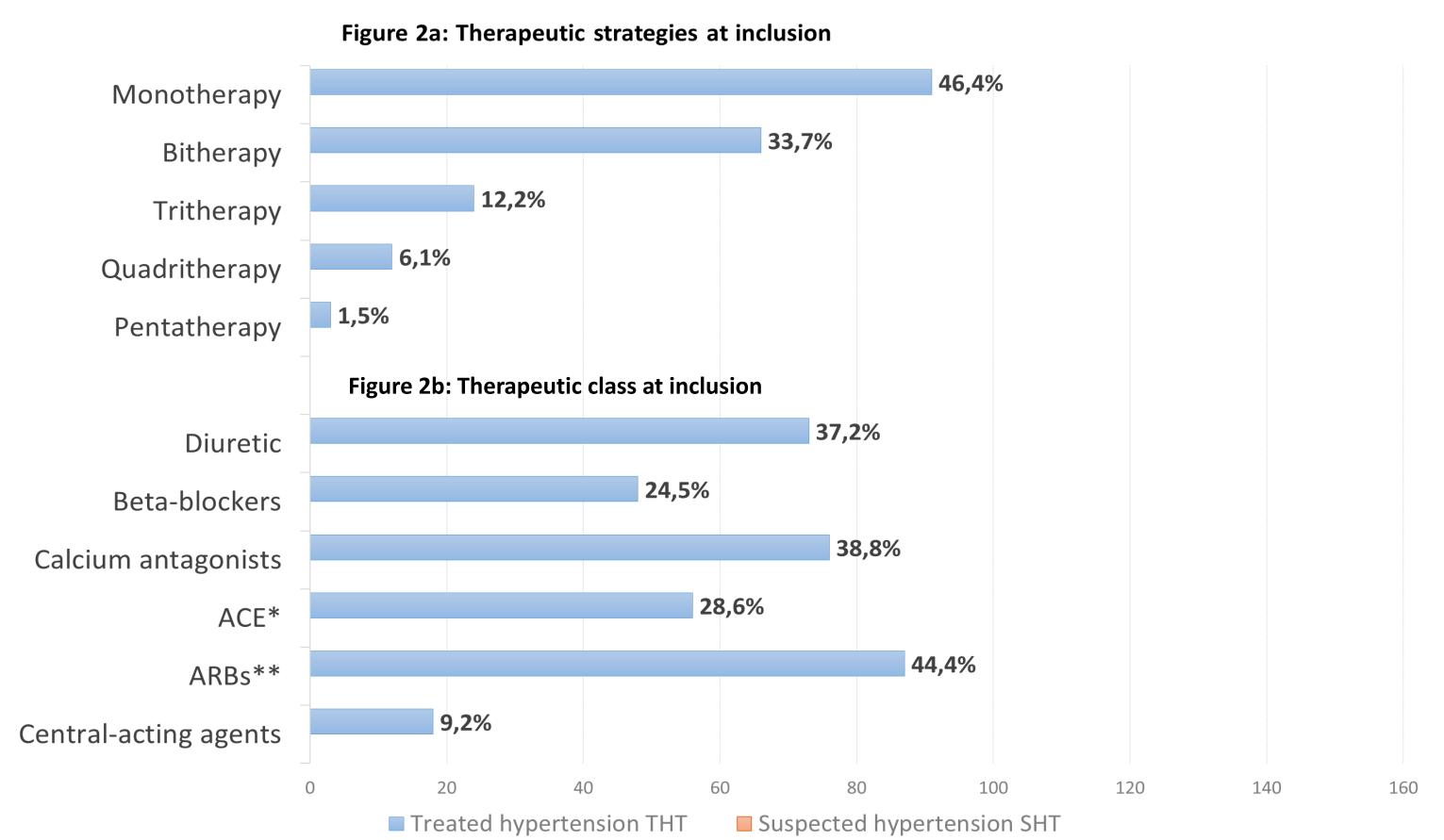
This is a Prospective, observational, multicentric study, designed to include 1000 patients; it has been initiated in June 2017.

Patients aged \geq 18 years with suspected (SHT) or treated hypertension (THT) were included. HT was defined according to current international guidelines as blood pressure (BP) \geq 140/90 mmHg. ABPM 24-hour was performed at the inclusion (V1) in all patients. Therapeutic decision was taken according to ABPM results at V2. Treated Patients are then followed up to 6 weeks (V3).

We present here the results of the interim analysis planned to be performed at N= 500 patients.

TREATMENTS AT INCLUSION

Treatment strategies and therapeutic class at V1 in THT patients (Figures 2a & 2b)



RESULTS

Among the 550 patients evaluated in this interim analysis, ABPM revealed that HT was non controlled by treatment for **52,40**% of THT patients (n=98) and confirmed HT for **63,10**% of SHT patients (n=214)

Figure 1: Results of ABPM monitoring

63,1%

52,4%

36,9%

Pathological

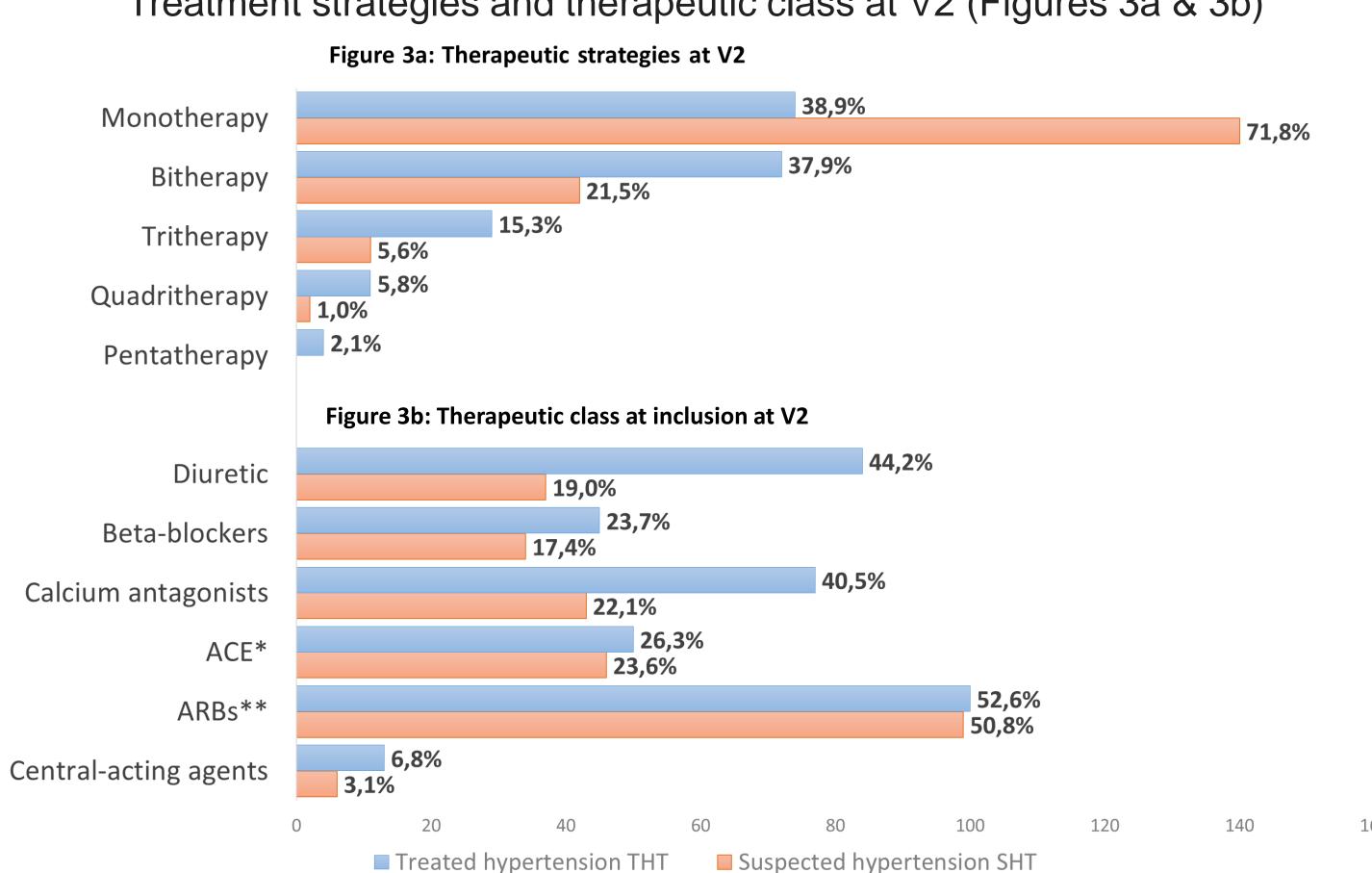
Suspected hypertension SHT

TREATMENTS AT VISIT 2

Normal

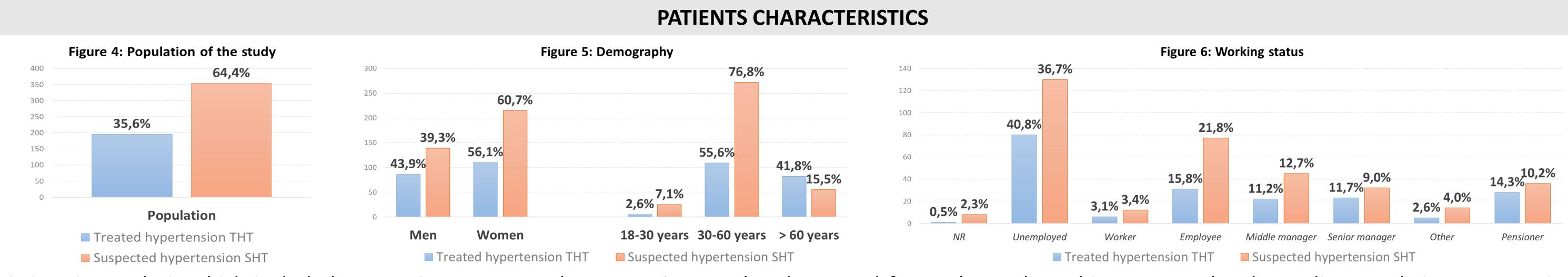
Treated hypertension THT

Treatment strategies and therapeutic class at V2 (Figures 3a & 3b)



* Angiotensin Converting enzyme **Angiotensin II receptor blockers

Therapeutic strategies were mainly based on monotherapy in both groups (46.4% and 38.9% of THT patients at inclusion and V2, respectively) and in 71.8% of SHT patients at V2. ARBs are the most prescribed drugs at V2 with 52.6% and 50.8% of SHT and THT patients, respectively (Figure 3b).



This interim analysis which included 550 patients, among them 35.6% were already treated for HT (n=196). In this group HT has been diagnosed since 6 years in average. The SHT group consisted on 64.4% of patients (N=354). Patients were mostly aged between 30 and 60 years (69.3%) with a predominance of females: 56.1% in THT group (N=110) and 60.7% in SHT group (N=215) - Figures 4,5 and 6.

DISCUSSION

Our national observational study aimed to evaluate the modalities of use and benefit of ABPM for diagnosis and management of HT in cardiology settings. The results showed in one hand that more than a half of the treated patients (52.4%) were not efficiently controlled and on the other hand, diagnostic of HT has been confirmed in two thirds of SHT patients (64.4%). For both groups the main therapeutic strategy was based on monotherapy, either for adaptation (THT) or initiation (SHT). ARBs therapeutic class stand out as primary choice for both groups with 52.6% and 50.8% in THT and SHT patients, respectively. Despite lack of data in Algeria on the contribution of the ABPM, these findings confirmed that the management of HT by the Algerian cardiologists is consistent with the international recommendations issued in 2011 by the National Institute for Health and Clinical Excellence (NICE).

CONCLUSION

These preliminary results showed that the frequency of HT remained higher, even in treated patients. Routine ABPM is valuable for diagnosis and for guiding treatment.

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