

Attempt of Definition on Dipping Phenomenon

M. Moonen, A. Saint-Remy, G. Rorive

Nephrology, Hypertension Unit, University Hospital, U. Lg. Liège, Belgium

The 24 H. monitoring of blood pressure (B.P.) is characterised by a nocturnal fall of B.P. The significance of the so called "DIPPING" is not fully understood, but could be related to some pathologies and to increased cardiovascular risk. The aim of the present study is to analyse: the prevalence of dippers and non-dippers (nocturnal fall < 10% of daytime B.P.); the implication of using standard definitions of day and night (07H.) compared to real behaviour of patients (diary); the differences between sex, its relation with age and the differences between systolic and diastolic dipping. Office B.P. and ABPM (Spacelabs 90207) have been performed in 68 unselected patients (42 men, 26 women). Theoretical and real dipping were calculated as: (Daytime BPBP)/Daytime BP. and expressed in %. *Results:* Prevalence of systolic and diastolic dippers are respectively 84% for theoretical and 78% for real values. There are more dippers in women than in men (88.5% vs 80.5%) for theoretical dipping and (88.5% vs 70.8%) for real one. The amplitude of the diastolic dipping is higher than the systolic one for theoretical values (SBP: 11% ± 6%; DBP 16% ± 7%) as for real values (SBP: 11% ± 7%; DBP: 17% ± 9%), $p < 0.05$. Systolic and diastolic dipping are significantly higher in women than in men as well for theoretical as for real values (SBP: 10.4% ± 1% in men and 12.2% ± 1.3% in women) and (DBP: 13.6% ± 0.9% in men vs 18.7% ± 1.6% in women). Dipping is not related to age for both sexes.

Conclusions: We observed a highly significant relation ($p < 0.0001$) between theoretical and real systolic and diastolic values of dipping. This study suggests the distinction between both systolic and diastolic dipping might be important for an accurate definition of this phenomenon. The relative importance of dipping in women compared to men is perhaps of clinical importance.

Variability