

## Cardiology 2018 : Non-Dipping Phenomenon; is it Reversible in Diabetic Hypertensive Cases? - Haitham Aly Amer - Matarya Teaching Hospital

*Haitham Aly Amer*

*Matarya Teaching Hospital, Egypt.*

### **Introduction:**

The prevalence of diabetes mellitus is estimated to increase in the future decades. Cardiovascular diseases may be the first cause of mortality in diabetic patients. The prevalence of arterial hypertension in diabetic patients is twice as high as general population. ABPM is particularly useful in diabetic patients for characterizing the nocturnal profile, because a non-dipping or hypertensive nocturnal BP pattern is more common in diabetic patients and is a strong predictor of future cardiovascular events. Because adequate BP control is especially important in diabetic patients, it becomes essential to verify the appropriateness of antihypertensive treatment with ABPM. ABPM allows for assessment of the efficacy of treatment on particularly important periods of the circadian cycle, such as the night-time and morning. Many studies using ABPM in diabetic patients treated for hypertension have shown that restoring nocturnal BP fall in diabetic non-dippers may be a difficult task with conventional antihypertensive therapy. The practice of pharmacological chronotherapy may increase in coming years given increasing interest in this approach. Chronotherapy involves "the timing of hypertension medications to endogenous circadian rhythm determinants of the 24 h [blood pressure] pattern". The aim of this study is to evaluate reversibility of non-dipping phenomenon in diabetic hypertensive patients

**Materials and methods:** This study enrolled 60 patients who were diabetic with uncontrolled hypertension with non-dipper pattern proved from the first ABPM. Then after office BP control, we classified the cases according to the second ABPM data regarding reversibility of non-dipping status into two groups: Group (I): Irreversible cases: included 56 patients, still having non-dipping pattern. Group (II): Reversible cases: only four cases who returned back into dipper status.

**Results:** Mean age was  $54.36 \pm 5.62$  years; and 73% of the study population was male. Also, 70 of the patients had LVH. There was no significant difference between both groups concerning demographic data p value was more than 0.05. Concerning ABPM data after BP control there was a highly significant difference between both groups regarding: Dipping % of SBP, Dipping % of DBP and Nocturnal SBP (p value Also, there was highly significant difference between both groups regarding nighttime doses of antihypertensive medications

**Conclusion:** Non-dipping phenomenon in diabetic hypertensive patients can be reversible. As such identifying non-dippers can be accomplished by conventional 24 h ABPM.

### **Biography:**

Haitham Aly Amer is currently working in atarya Teaching Hospital, Egypt He has published more than 25 papers in reputed journals and has been serving as an editorial board member of repute

**E-mail:** [Haithamamer75@gmail.com](mailto:Haithamamer75@gmail.com)