The Effects of Hours of Antihypertensive Drugs on Ambulatory Blood Pressure

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Introduction

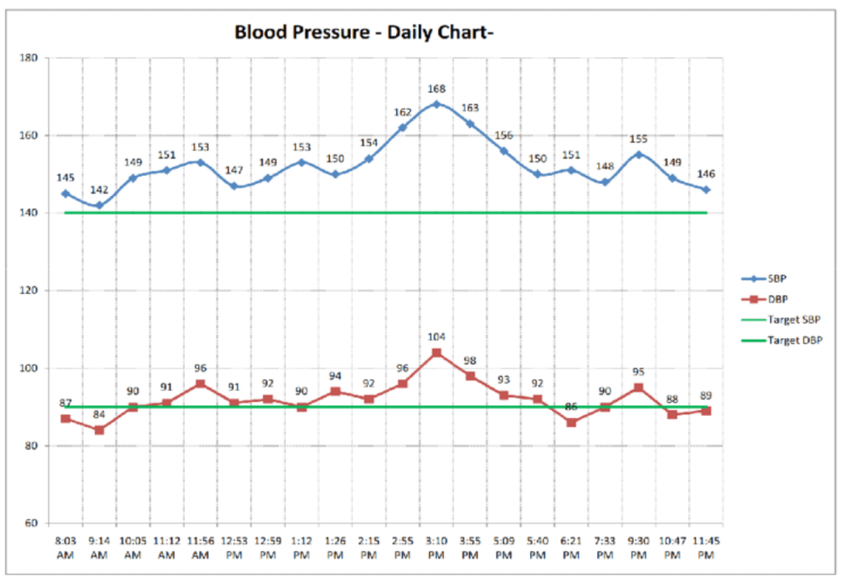
Hypertension is a serious disease that needed to be treated properly. There are modifiable and non-modifiable factors that can affect the blood pressure. It is known that factors such as excessive salt consumption, obesity, endocrine diseases and genetics plays role, in the development of hypertension. In the literature there are studies on the time-dependent effects of antihypertensive drugs. *Non-dipper* is the failure of blood pressure drop %10 which is consider normal at night, and higher pressure than normal in the morning is called *morning surge*. Presence of *non-dipper* and *morning surge* has been associated with poor prognosis in studies. The purpose of our study is to reveal the relationship between the intake time of drugs and blood pressure values.

BLOOD PRESSURE GUIDELINES

Blood Pressure Category	Systolic mm Hg (upper #)		Diastolic mm Hg (lower #)
Normal	less than 120	and	less than 80
Elevated	120-129	and	less than 80
High Blood Pressure (Hypertension) Stage 1	130-139	or	80-89
High Blood Pressure (Hypertension) Stage 2	140 and higher	or	90 or higher
Hypertensive Crisis (Consult your doctor immediately)	higher than 180	and/or	higher than 120

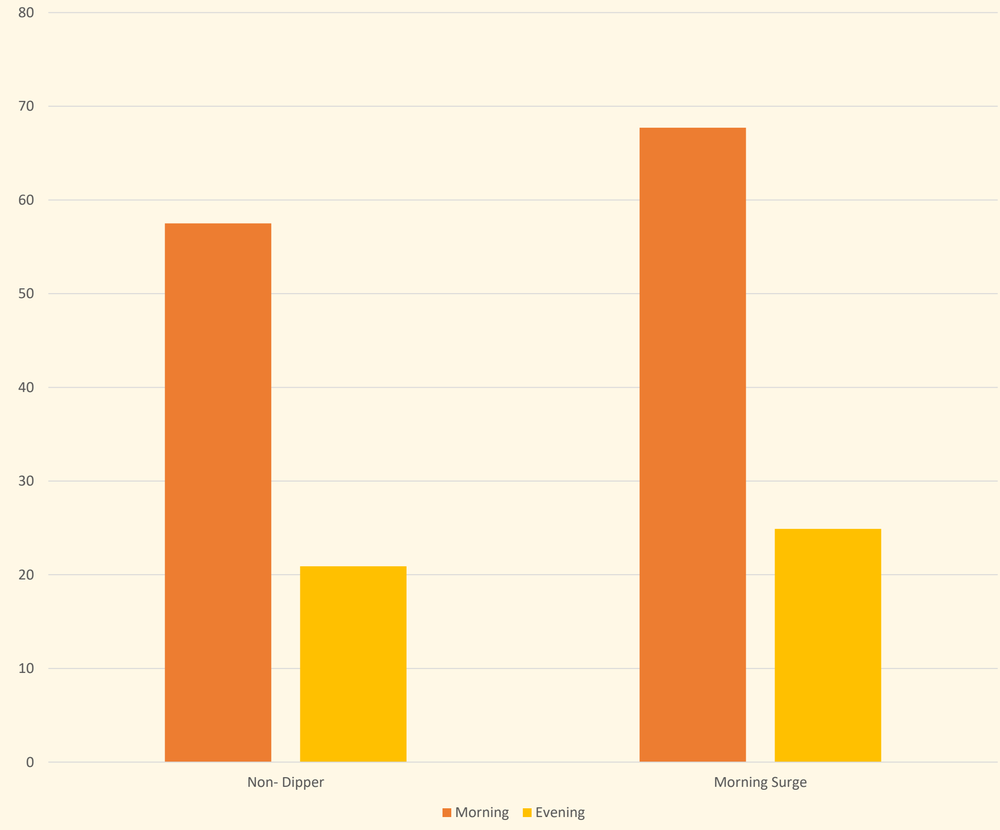
Methodology

In this retrospective study, we used blood pressure values of the patients that was recorded into the system with Holter monitor. We used the patients' blood pressure values who use ARBs and ACEIs and noted the time they took drug. We compared that time and the presence of the *non-dipper* and *morning surge*.



Results

There were 95 patients who took drug in the morning and 31 patients who took it in the evening. While the morning group had %71.3 *non-dipper*, the evening group had %80.6 of it (p= 0,305). The morning group had %60.6 *morning surge* whilst the evening group had %67.7 of it (p=0,479).



Conclusion

Considering the inequality number of patients in the groups, there are no significant differences were found.

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