



Schweizerische Hypertonie-Gesellschaft
Société Suisse d'Hypertension
Società Svizzera d'Ipertensione
Swiss Society of Hypertension

Hot from the hypertensive press

Short analysis of clinical studies that may change our practices in the field of hypertension
03/2021

Are bedtime blood pressure medication as good as bedtime stories?

In 2020 Hermida RC et al. published a large study entitled “Bedtime hypertension treatment improves cardiovascular risk reduction” [1]. This article has been extensively commented in the (non-)specialist press and many practical physicians began to switch the medication administration in the evening. Recently, the editors of the “Journal of Hypertension” and members of the European and/or US Hypertension Guidelines Committee published an Editorial entitled “Disregard the reported data from the HYGIA project: blood pressure (BP) medication not to be routinely dosed at bedtime [2]”. Here are the summarized arguments against the routinely administration in the evening:

- In patients with low night-BP exaggerated BP decrease has been associated with
 - increased risk for ischemia in the presence of coronary heart disease [3]
 - increased risk for silent cerebral insults [4]
- The risk for adverse events is particularly high in older patients [5]
- Drug adherence is lower if administered in the evening [6]
- Finally, the study design, data acquisition and presentation has been criticized [2, 7]

In conclusion, there is (still) no evidence supporting the routinely administration of BP medication at bedtime.

[1] Hermida RC et al., Eur Heart J. 2020;41:4565-4576.

[2] Kreutz R et al., J of Hypertens 2020;38:2144-2145.

[3] Pierdomenico SD et al., JACC 1998;31:1627-1634.

[4] Kario K et al., Hypertension 2001;38 :852-857.

[5] Pierdomenico SD et. al., Hypertens Res 2016 ;39 :805-811.

[6] Vrijens B et al., BMJ 2008 ;336 :1114-1117.

[7] Burnier M. et al., J of Hyperens 2020 ;38 :1396-1406.

Prof. Stefano F. Rimoldi, Swiss Society of Hypertension

27.04.2021