Switching therapy to bedtime of uncontrolled hypertension.

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Abstract

Uncontrolled hypertension is present in most patients treated with only single morning dose or one of the tablet contain combined therapy, usually most of them showed a high prevalence of a non-dipper blood pressure pattern. In most of cases non-dipping is related partly to the absence of 24-hour therapeutic coverage of the single morning doses. Accordingly, we investigated the impact of treatment time on the blood pressure pattern in 30 patients with uncontrolled [hypertension] on the basis of clinic measurements who were studied by 24-hour ambulatory monitoring during four months follow-up. All of them received their medication on awakening, most of the treatment was calcium channel blockers and other ACEI, and 10 patients were taking one tablet of combined treatment (calcium blocker with ACEI). After the control period we switched all patients to take their therapy at bedtime. The percentage of patients with controlled ambulatory blood pressure was 0.86 in patients taking the drug at bedtime (P=0.005). 26 patients with uncontrolled [hypertension], receiving one drug or the combined therapy at bedtime showed a significant reduction in the 24-hour mean of systolic and diastolic blood pressure (6.2 and 2.6 mm Hg, respectively; P<0.009). This reduction was much more prominent during nighttime (8.3 and 5.0 mm Hg; P<0.001). In addition the entire 26 patient showed normal blood pressure <140/90 during clinic measurement at daytime. Only 4 patients who treated with monotherapy on the morning were unresponsive to the switching and their blood pressure was controlled by the addition of second drug at bedtime. In patients with uncontrolled hypertension, switching therapy to bedtime should take into account to improve control and to avoid the non-dipper pattern especially in patients with chronic illness, diabetes and renal diseases associated to higher cardiovascular risk, we need to complete this research with more time periods and sample to check the reliability of changing treatment time and testing this method on patients with chronic diseases and multiple drugs therapy.