determined that the authors have no financial or any other kind of personal conflicts with this paper.

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**REFERENCES**


**BLOOD PRESSURE VARIATIONS AFTER HOSPITAL DISCHARGE IN OLDER ADULTS WITH HYPERTENSION**

To the Editor: The prevalence of hypertension increases with age, and older adults represent the majority of patients with hypertension.1

Lifelong exposure to cardiovascular risk factors put older adults at high risk of cardiovascular events, but older adults are also at high risk for treatment-related adverse events (e.g., hypotensive episodes, syncope, and falls).2 In view of this, a hospital stay can represent a good opportunity to titrate antihypertensive therapy, but to the best of the authors’ knowledge, no study has previously addressed modifications of blood pressure (BP) values in older adults with hypertension after hospital discharge. Variations in BP values after hospital discharge were compared with values recorded during the hospital stay and at discharge in a population of older adults with hypertension hospitalized for an acute illness.

**METHODS**

This prospective observational study was conducted on the geriatric ward of a university teaching hospital in Torino, Italy, between February and May 2009.

All patients aged 65 and older who were taking antihypertensive medication at time of ward admission were considered for enrollment. Exclusion criteria were terminal illness, admission for syncope, discharge to institution or to another hospital ward, and changes in the antihypertensive regimen before completion of the study protocol.

Demographic data and a thorough medical history (including a careful review of antihypertensive medication) were collected. Functional status was assessed according to the index of independence in activities of daily living (ADLs) and Instrumental activities of daily living (IADLs); subjects with an ADL score of 2 or greater or an IADL score of 10 or less were considered dependent. Cognitive status was evaluated using the Short Portable Mental Status Questionnaire (SPMSQ); a score greater than 4 indicated cognitive impairment.

The following BP values were considered for analysis: in the emergency department, at ward admission, the mean of two daily BP measurements recorded during the hospital stay, at discharge, and the mean of six daily self BP measurement (SBPM) readings at home over a 7-day period starting from the day after discharge. All patients (or persons usually caring for those unable to reliably perform BP measures) were carefully instructed on SBPM with automated devices validated according to current guidelines.3

**RESULTS**

Of the 113 eligible patients, four refused to participate in the study, and three reported modifications in the antihypertensive regimen before completion of the study, so the analysis included 106 subjects. Mean age was 80.1 ± 7.7, 58.5% were female. Forty-eight subjects (45.3%) were dependent, and 11 (10.4%) were cognitively impaired.

There was a significant decrease in systolic BP (SBP) and diastolic BP (DBP) throughout the study time points \((F = 10.53, P < .001\) and \(F = 24.93, P < .001\)). SBPM readings at home showed lower values of SBP and DBP than values at discharge \((131.5 ± 16.1\) and \(135.1 ± 15.0\) mmHg vs \(71.6 ± 8.7\) and \(77.2 ± 8.4\) mmHg, respectively), the difference being significant only for DBP \((t = 6.02, P < .001)\) (Figure 1). A significantly higher percentage of subjects had well-controlled hypertension at home than at hospital discharge \((70.8\% vs 52.8\%, P < .001)\).

In multivariable analysis, only SBP and DBP values at discharge were independent predictors of decrease in SBP \((\beta = 0.068, \text{odds ratio (OR)} = 1.07, P = .04\) and \(\beta = 0.123, \text{OR} = 1.1, P = .05\), respectively), and only DBP values at discharge were independently associated with decrease in DBP \((\beta = 0.128, \text{OR} = 1.14, P = .02)\).

**DISCUSSION**

In a sample of older hospitalized adults with hypertension, a decrease was observed in BP values, particularly DBP values, after hospital discharge, and a greater percentage of subjects with well-controlled hypertension was observed at home than at discharge. This decrease in BP values observed after hospital discharge is difficult to explain. Discharge to home for community-dwelling older subjects should be associated with greater participation in daily duties and activities, and therefore, at least a trend toward higher BP values should be expected. Nevertheless, significantly lower
BP values were observed at home than at discharge and during the hospital stay, this difference being smaller than those reported in studies comparing SBPM with single clinic records. It can therefore be speculated that some persisting white coat effect during the hospital stay (mitigated but not abolished by the reiterated hospital measurements) might exert greater influence on BP values than change in lifestyle associated with home return after hospital discharge.

Figure 1. Mean systolic and diastolic blood pressure values measured in the emergency department, at ward admission, during the hospital stay, at hospital discharge, and at home. Multivariate analysis of variance for repeated measures: F = 10.53, P < .001 and F = 24.93, P < .001 for systolic and diastolic blood pressure throughout study time points, respectively. Paired Student t-test: t = 1.87, P = .06 and t = 6.02, P < .001 for the difference in systolic and diastolic blood pressure at home and at discharge.

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REFERENCES

SURVIVAL OF THE FATTEST

To the Editor: Flicker and colleagues1 found that overweight older people have a lower mortality rate than “normal weight” older people. They suggest that this might be due to overweight people, in the event of illness, having greater metabolic and nutritional reserves.

Another possible explanation for the lower mortality rate involves the protective effect of fat. Falls are a common health event for older people. In the event of a fall, the additional “padding” reduces the likelihood of a hip fracture, avoiding the risk of surgical complications, postoperative infections, or blood clots occurring after extended periods of traction.

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REFERENCE