

As an example, older adult patients may be at particularly high risk for cerebral or myocardial ischemia if the blood pressure is lowered excessively and/or too rapidly. In such patients, who often will have a high pulse pressure (eg, diastolic blood pressure <90 mmHg with systolic blood pressure \geq 180 mmHg), the initial goal blood pressure may need to be achieved even more slowly (eg, over a week or more).

Management of severe asymptomatic hypertension (hypertensive urgencies) in adults - UpToDate

As-Needed Blood Pressure Medication and Adverse Outcomes in VA Hospitals |
Reproductive Health | JAMA Internal Medicine | JAMA Network

Perils of PRN anti-hypertensive medications. JAMA Intern. Med recently published a retrospective cohort study of 133,760 veterans hospitalized on medical and surgical units at VA hospitals who received >1 scheduled anti-hypertensive medication within 24 hours of admission with >1 systolic blood pressure (BP) >140 mmHg during hospitalization. The authors compared adverse event rates in those who received as-needed anti-hypertensive medications during hospitalization and those who did not. 28,526 patients (21%) received as needed anti-hypertensive medications. As-needed users appeared to have a 1.2x increased risk of acute kidney injury (95% CI 1.18-1.29) particularly with IV medication use, 1.5x greater risk of rapid BP reduction (95% CI 1.39-1.62), and 1.7x higher risk of a composite of myocardial infarction, stroke, or death during hospitalization (95% CI 1.49-1.92) compared to non-users. This study used target trial emulation, which reduces but does not eliminate the risk of confounding in observational studies (including confounding by indication). (JD)

PRN Antihypertensive Medications and Adverse Outcomes in Hospitalized Patients: A
Propensity Matched Cohort Study - PMC (nih.gov)



 The use of as needed antihypertensive medication is associated with an abrupt drop in blood pressures, increased risk of ischemic events, in-hospital mortality, and longer length of stay. We suggest that the routine use of as needed antihypertensive medication should be discouraged.

More About Treating Inpatient Hypertension with IV Antihypertensives (jwatch.org)

<u>Treatment and Outcomes of Inpatient Hypertension Among Adults With Noncardiac</u>

<u>Admissions | Less is More | JAMA Internal Medicine | JAMA Network</u>

Conclusions and Relevance In this cohort study, hypertension was common among
medical inpatients, but antihypertensive treatment intensification was not.
Intensification of therapy without signs of end-organ damage was associated with
worse outcomes. Conclusions and Relevance In this cohort study, hypertension was
common among medical inpatients, but antihypertensive treatment intensification was
not. Intensification of therapy without signs of end-organ damage was associated with
worse outcomes.