HYPERTENSIVE URGENCY

DBP > 130
The initial goal in patients with severe asymptomatic hypertension should be a reduction in blood pressure to 160/110 over several hours [3-6] with conventional oral therapy.

1. Rest in a quiet room and, if the patient is not volume depleted.
2. Loop diuretic can lead to a fall in BP to a safe level in many patients. With furosemide, for example, the dose is 20 mg if renal function is normal, and higher if renal insufficiency is present.
3. Oral calcium channel blocker (isradipine, 5 mg or felodipine, 5 mg)
4. CAPTOPRIL (12.5 mg) can be added if the response is not adequate.
5. Hydralazine.

HYPERTENSIVE EMERGENCY:
- Malignant hypertension is marked hypertension with retinal hemorrhages, exudates, or papilledema. There may also be renal involvement, called malignant nephrosclerosis.
- Hypertensive encephalopathy refers to the presence of signs of cerebral edema caused by breakthrough hyperperfusion from severe and sudden rises in blood pressure.

CLINICAL MANIFESTATIONS
1. Retinal hemorrhages and exudates and papilledema.
3. Neurologic symptoms due to intracerebral or subarachnoid bleeding, lacunar infarcts, or hypertensive encephalopathy.
4. Cerebral edema: headache, nausea, and vomiting, followed by nonlocalizing neurologic symptoms such as restlessness, confusion, seizures.
5. Pulmonary: CHF exacerbation, Orthopnea, dyspnea, PND, pulmonary edema.

TREATMENT:
Nitroprusside — an arteriolar and venous dilator, I/V infusion. Most rapid and potent. It acts within seconds and has a duration of action of only 2 to 5 minutes. Cyanide toxicity in patients treated with high doses, for a prolonged period (>24 to 48 hours), or with underlying renal insufficiency.
Nitroglycerin — a venous and, to a lesser degree, arteriolar dilator, I/V infusion.
Labetalol — an alpha- and beta-adrenergic blocker, I/V bolus or infusion.
Nicardipine — a calcium channel blocker, I/V infusion.
Fenoldopam — a peripheral dopamine-I receptor agonist, I/V infusion.
Hydralazine — an arteriolar dilator, I/V bolus.
Propranolol — a beta-adrenergic blocker, I/V infusion, then oral Rx.
Phentolamine — an a-adrenergic blocker, I/V bolus.
Enalaprilat — An ACEI, I/V bolus. 0.
SPECIFIC TREATMENTS:
Ischemic stroke or subarachnoid or intracerebral hemorrhage — The benefit of reducing the BP in these disorders must be weighed against possible worsening of cerebral ischemia induced by the thrombotic lesion or by cerebral vasospasm
Acute pulmonary edema — Nitroprusside or nitroglycerin with a loop diuretic is the regimen of choice for this problem. Avoid Hydralazine[ increases cardiac work] and BB [dec. contractility]
Angina pectoris or acute myocardial infarction — Nitroprusside and Nitroglycerin, Labetalol. Aortic dissection — Nitroprusside, propranolol or labetalol. Nitroprusside should not be given without a beta blocker.
Withdrawal of antihypertensive therapy — clonidine or propranolol. Rx readministration of the discontinued drug and, if necessary, phentolamine, nitroprusside, or labetalol. Pregnancy — Intravenous hydralazine.