

# Hypertensive Crisis

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General Internal Medicine

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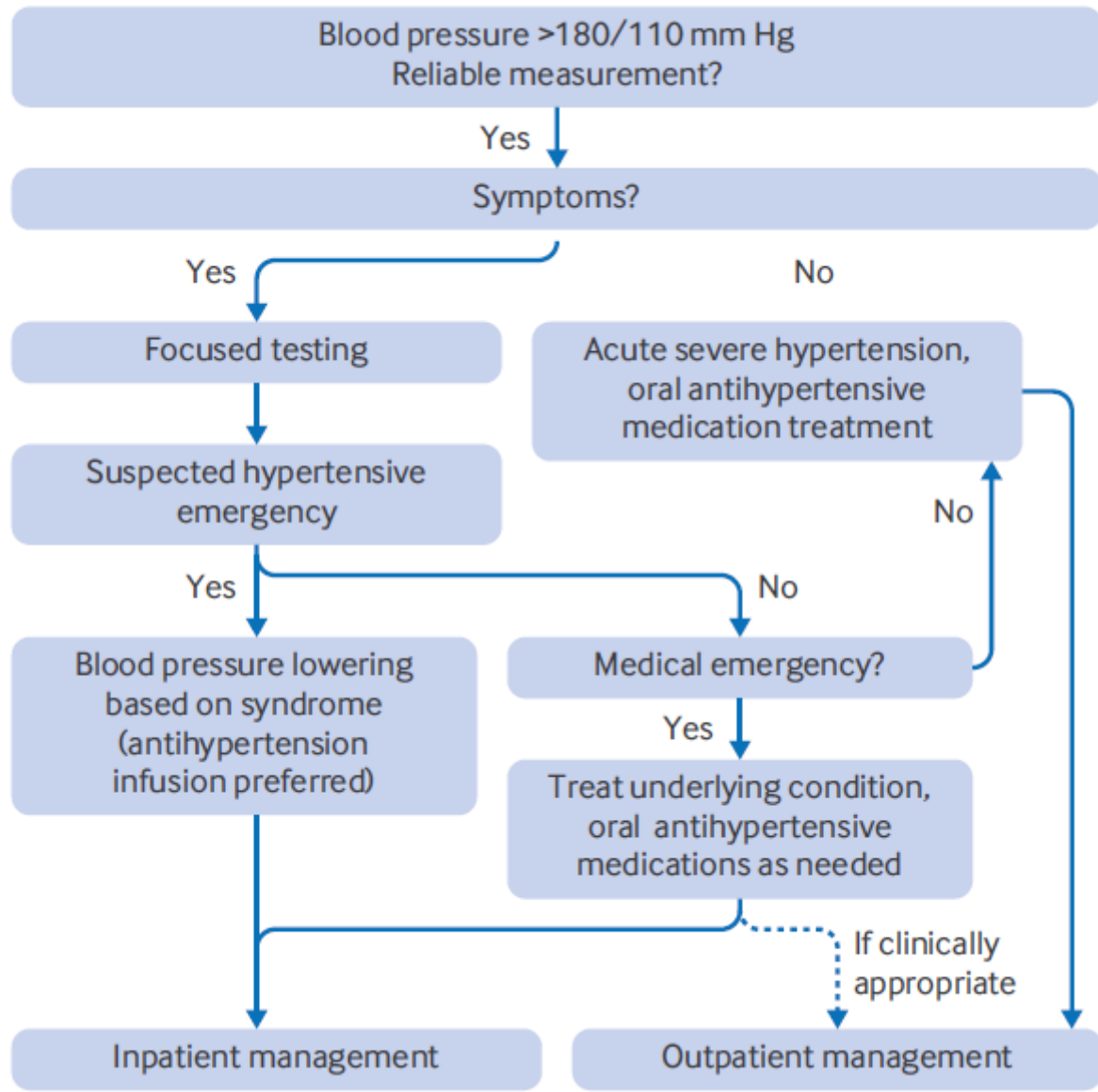
# Terminology

## Hypertensive Crisis

Severe  
Hypertension  
(No end organ  
damage)

Malignant  
Hypertension

Hypertensive  
Emergency  
(End organ  
damage)



Clinical Presentation	Timeline and Target BP	First Line Treatment	Alternative
Malignant hypertension with or without TMA or acute renal failure	Several hours, MAP –20% to –25%	Labetalol Nicardipine	Nitroprusside Urapidil
Hypertensive encephalopathy	Immediate, MAP –20% to –25%	Labetalol Nicardipine	Nitroprusside
Acute ischaemic stroke and SBP >220 mm Hg or DBP >120 mm Hg	1 h, MAP –15%	Labetalol Nicardipine	Nitroprusside
Acute ischaemic stroke with indication for thrombolytic therapy and SBP >185 mm Hg or DBP >110 mm Hg	1 h, MAP –15%	Labetalol Nicardipine	Nitroprusside
Acute hemorrhagic stroke and SBP >180 mm Hg	Immediate, 130<SBP<180 mm Hg	Labetalol Nicardipine	Urapidil
Acute coronary event	Immediate, SBP <140 mm Hg	Nitroglycerine Labetalol	Urapidil
Acute cardiogenic pulmonary edema	Immediate, SBP <140 mm Hg	Nitroprusside or nitroglycerine (with loop diuretic)	Urapidil (with loop diuretic)
Acute aortic disease	Immediate, SBP <120 mm Hg and heart rate <60 bpm	Esmolol and nitroprusside or nitroglycerine or nicardipine	Labetalol or metoprolol
Eclampsia and severe preeclampsia/ HELLP	Immediate, SBP <160 mm Hg and DBP <105 mm Hg	Labetalol or nicardipine and magnesium sulphate	

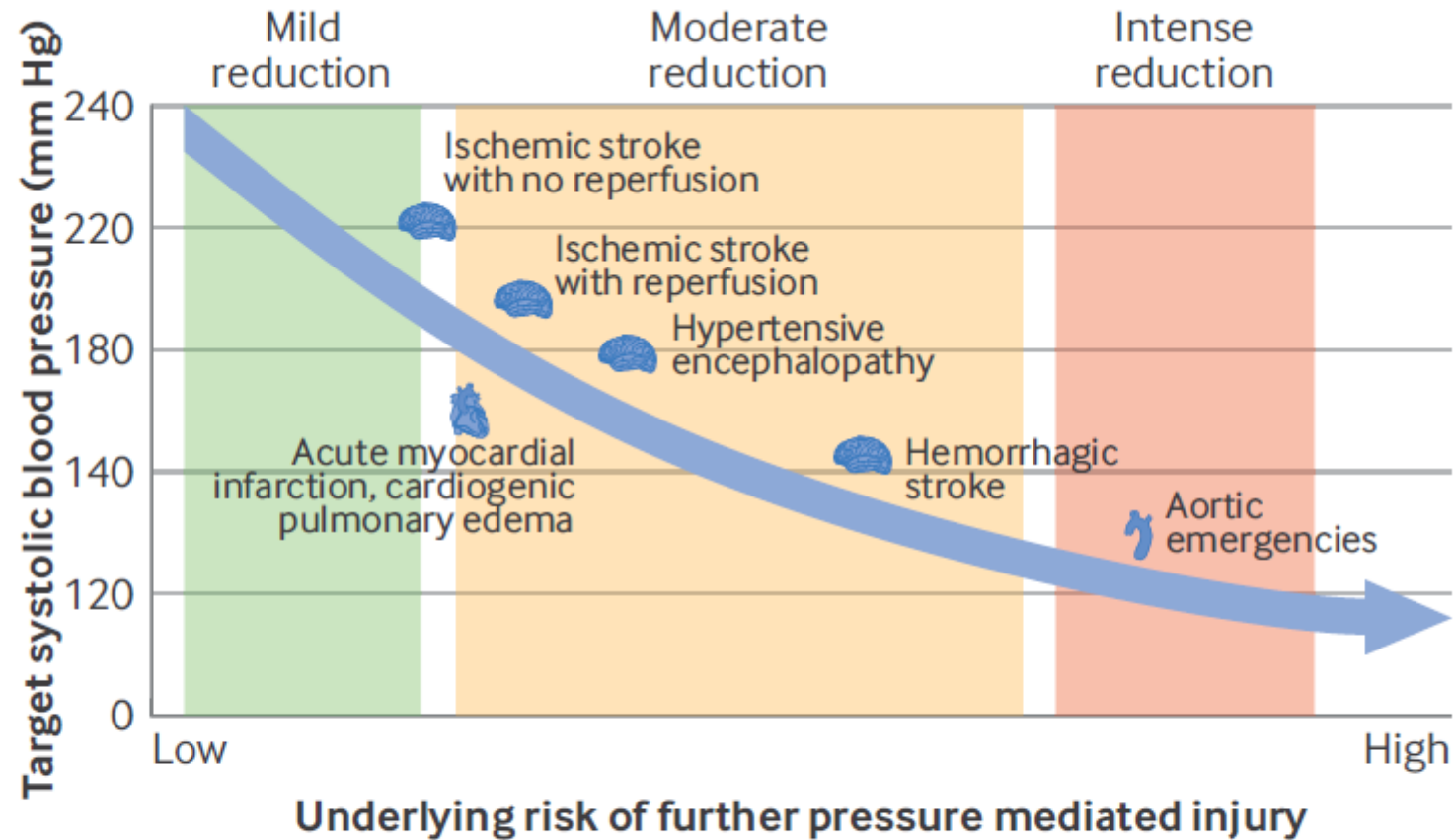


Fig 4 | Recommended intensity of blood pressure lowering target relative to the underlying risk of further pressure-mediated injury in hypertensive emergency syndromes

# Take Home Points

- Severe Hypertension is common
  - Hypertensive Emergency less common
- Symptomatic or asymptomatic?
- Any sign of end-organ dysfunction?
  - If yes, then you have Hypertension Emergency
  - If no, then not Hypertensive Emergency
- Hypertensive emergency requires inpatient management
  - Typically in ICU or CCU with IV medication
- Severe Hypertension without emergency is typically treated with oral medications as an outpatient