Guidelines for BP Management in Acute Stroke

Page Sections

- Eligible for IV thrombolytic therapy (with the exception of elevated BP)
- Not eligible for thrombolytic therapy (for reasons other than just elevated BP)

Prior to making any medical decisions, please view our disclaimer.

Eligible for IV thrombolytic therapy (with the exception of elevated BP)

- Pretreatment
  - Systolic greater than 185 OR diastolic greater than 110
    - Labetalol 10 - 20 mg IV over 1 - 2 min
    - Nitropaste 1 - 2 in
  
  - If still elevated,
    - May repeat or double labetalol every 10 min to maximum dose of 300 mg, or give initial labetalol dose, then start labetalol drip at 2 - 8 mg/min
    - Nicardipine 5 mg/h IV infusion as initial dose and titrate to desired effect by increasing 2.5 mg/h every 5 min to maximum of 15 mg/h
  
  - If blood pressure is not controlled by labetolol or nicardipine, consider sodium nitroprusside or rule out other cause of acute hypertension such as hypertensive urgency

- During/after treatment
  
  1. Check blood pressure every 15 min for 2 h, then every 30 min for 6 h, and finally every hour for 16 h
  
  2. Diastolic greater than 140
    - Sodium nitroprusside 0.5 mcg/kg/min IV infusion as initial dose and titrate to desired blood pressure

  3. Systolic greater than 230 OR diastolic 121 – 140.

  - Option 1
    - Labetalol 10 mg IV for 1 - 2 min
    - May repeat or double labetalol every 10 min to maximum dose of 300 mg, or give initial labetalol dose, then start labetalol drip at 2 - 8 mg/min

  - Option 2
    - Nicardipine 5 mg/h IV infusion as initial dose and titrate to desired effect by increasing 2.5 mg/h every 5 min to maximum of 15 mg/h; if blood pressure is not controlled by labetolol or nicardipine, consider sodium nitroprusside.

  4. Systolic 180 - 230 OR diastolic 105 – 120
    - Labetalol 10 mg IV for 1 - 2 min
    - May repeat or double labetalol every 10 - 20 min to maximum dose of 300 mg or give initial labetalol dose, then start labetalol drip at 2 - 8 mg/min

Not eligible for thrombolytic therapy (for reasons other than just elevated BP)

- Systolic less than or = 220 OR diastolic less than or = 120
  
  - Observe unless other end-organ involvement (eg, aortic dissection, acute myocardial infarction, pulmonary edema, hypertensive encephalopathy)
  
  - Treat other symptoms of stroke (eg, headache, pain, agitation, nausea, vomiting)
  
  - Treat other acute complications of stroke, including hypoxia, increased intracranial pressure, seizures, or hypoglycemia

- Systolic greater than 220 OR diastolic 121 - 140. 2 options:

  - Option 1
    - Labetalol 10 - 20 mg IV for 1 - 2 min
    - May repeat or double every 10 min (max dose 300 mg)

  - Systolic greater than 220 OR diastolic 121 - 140

  - Option 2
- Nicardipine 5 mg/h IV infusion as initial dose; titrate to desired effect by increasing 2.5 mg/h every 5 min to max of 15 mg/h
- Aim for a 10% - 15% reduction in blood pressure
  - Diastolic greater than 140
    - Nitroprusside 0.5 mcg/kg/min IV infusion as initial dose with continuous blood pressure monitoring
    - Aim for a 10% - 15% reduction in blood pressure