

FOUNDATIONS of Emergency Medicine

Approach to Stroke Management

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Initial Stabilization

- ABCs intubate as needed, beware of Cushing's Triad (sign of herniation), hypotension is rare (discern cause if present)
- Evaluate pupils consider hypertonic saline/mannitol if blown pupil or signs of herniation (posturing)
- Check glucose



Obtain a CT Brain

Hemorrhagic - Bleed on CT

- Hypertensive
 - · Seen with chronic HTN, blood in parenchyma
 - Typical locations: Deep structures (Basal ganglia, Thalamus, Pons, Cerebellum)
- SAH
 - Spontaneous: aneurysmal, AVM
- Hemorrhagic transformation of ischemic stroke

Ischemic - Normal CT

- Large vessel = Cortical lesion affecting ACA, MCA, PCA, Basilar, vertebral territories
 - Diagnosis pearls: (think large vessel IF -> obtain CTA perfusion study)
 - 1. Decreased level of consciousness
 - 2. Motor AND sensory deficits
 - 3. Higher level "thinking" processes are affected
 - 4. Aphasia, right sided neglect, eye deviation (Frontal Eye Fields)
- Small vessel = Lacunar syndrome
 - No change in consciousness, no aphasia or neglect, motor OR sensory





- Neurosurgical decompression
- BP control: utilize nicardipine for goal SBP 140-180
- Reverse anticoagulation
- Increased ICP: hypertonic saline/mannitol, surgical decompression
- Reperfusion treatment (and aspirin if pt is not a tPA candidate)
 - Large vessel: tPA, endovascular intervention
 - · Small vessel: tPA

Consider Stroke Mimics

Hypoglycemia
Seizure - postictal Todd's paralysis
Metabolic encephalopathy

Drug overdose Complex migraines Peripheral nerve compression PRES

Peripheral vestibular disorder Recrudescence