Complete Suspected Stroke Algorithm

Goals for Management of Patients With Suspected Stroke Algorithm

1. Identify signs of possible stroke

2. Critical EMS assessments and actions
   - Support ABCs; give oxygen if needed
   - Perform prehospital stroke assessment (Tables 1 and 2)
   - Establish time when patient last known normal (Note: therapies may be available beyond 3 hours from onset)
   - Transport; consider triage to a center with a stroke unit if appropriate; consider bringing a witness, family member, or caregiver
   - Alert hospital
   - Check glucose if possible

3. Immediate general assessment and stabilization
   - Assess ABCs, vital signs
   - Provide oxygen if hypoxemic
   - Obtain IV access and blood samples
   - Check glucose; treat if indicated
   - Perform neurologic screening assessment
   - Activate stroke team
   - Order emergent CT scan of brain
   - Obtain 12-lead ECG

4. Immediate neurologic assessment by stroke team or designee
   - Review patient history
   - Establish symptom onset
   - Perform neurologic examination (NIH Stroke Scale or Canadian Neurologic Scale)

5. Does CT scan show any hemorrhage?
   - No Hemorrhage
   - Hemorrhage

6. Probable acute ischemic stroke; consider fibrinolytic therapy
   - Check for fibrinolytic exclusions (Table 3)
   - Repeat neurologic exam: are deficits rapidly improving to normal?

7. Consult neurologist or neurosurgeon; consider transfer if not available

8. Patient remains candidate for fibrinolytic therapy?
   - Candidate
   - Not a Candidate

9. Administer aspirin

10. Review risks/benefits with patient and family: if acceptable —
    - Give tPA
    - No anticoagulants or antiplatelet treatment for 24 hours

11. Begin stroke pathway
    - Admit to stroke unit if available
    - Monitor BP; treat if indicated (Table 4)
    - Monitor neurologic status; emergent CT if deterioration
    - Monitor blood glucose; treat if needed
    - Initiate supportive therapy; treat comorbidities

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