Scenario #5: Geriatric Cerebral Vascular Accident- Version 5

Goals & Objectives:
1. Recognize the various presentations of CVA's.
2. Practice administering the NIH Stroke Scale items.
3. Understand a decision-making process for administering TPA.
4. Learn to stratify patient eligibility for a "Stroke Alert".
5. Review risk factors for CVA.
6. Recognize the importance of baseline information for geriatric patients.
(Illnesses, surgeries, allergies, ADL's, education, occupation, etc)

Equipment:
1. SimMan
2. Code Cart
3. Monitor/Defibrillator/Pacer
4. Live patient
5. Co-worker of patient-secretary
6. NIH Stroke Scale score document
7. TPA flow sheet for CVA
8. Normal head CT
9. EKG with A-fib

Moulage:
1. Live patient will have subtle right sided weakness
2. Live patient will have a subtle expressive aphasia
3. Patient in rate controlled a-fib (hard to see on monitor)

Sim Spec Instructions:
1. Live patient will speak for Sim Man and respond to neuro exam
2. Hard to see rate controlled atrial fibrillation

Initial Vignette:
61 yr old male who was at work when he was found by another worker at his desk not answering his telephone. Per EMS they found him awake and alert. He was able to answer all of their questions. Initial vital signs: 160/101, pulse 90, RR 20, O2sat 98%. GCS 15.

Initial Appearance:
Awake and alert on the stretcher looking around.
BP 165/5100, pulse 88, RR 20, O2 sat 100%.

Only give below if asked:
PMH: Hypertension
Meds: None
Allergies: None
SH: CEO of Fortune 500 company
Scenario Flow (H&P 8 min/ NIH SS 5 min/ Interpret CT and TPA orders 5 min)

- Blood pressure, pulse oximetry, cardiac monitor rhythm (a-fib)
- Administer O2, INT
- Obtain HPI from witness and patient
- Perform neurologic exam
- Recognize MSE deficits and focal deficits consistent with CVA
  Very subtle loss of grip strength right hand
  Expressive aphasia; states wrong words for common objects
- Note high blood pressure and A-fib noted as risk factors for CVA
- Decide on eligibility for "Stroke Alert"
- EKG: Shows A-fib, rate controlled
- Labs: FSBS, CBC, BMP, PT/INR, Cardiac enzymes, UDS
- Radiology: Stat CT or CT-A of head

***********************************************************

- Perform NIH Stroke Scale

***********************************************************

- Interpret CT; no bleed
- Decide on eligibility for TPA
- Consult neurologist
- Fill out TPA order sheet

Critical Actions
- Note a-fib on monitor or EKG
- Check FSBS
- Complete neurological exam with all components of the MSE
- Recognize patient has a CVA
- Determine time of onset of symptoms
- Recognize patient is eligible for "Stroke Alert"
- Stat CT head
- Review if contraindications to TPA
- Interpret CT head

Facilitator Debriefing Points
- Importance of obtaining the PMH and SH early
- What are ADL’s. (Hygiene, Dressing, Toileting, Transferring, Eating)
- Review components of neurological and MSE exam (MSE: person, place, time, situation, repeat 3 words, serial 7’s, recall 3 words, naming, repetition, comprehension, reading)
- Appropriateness for abbreviated and for complete neurological exam
- Complete as possible information regarding time of onset of symptoms
- What does a "Stroke Alert" mean
- Use of NIH Stroke Scale
- CT vs. MRI
For Geriatric Scenario #5

**CBC Results**

**WBC:** 8,100  
**Polys:** 55%  
**Bands:** 2%  
**Lymph:** 45%

**HgB:** 13.9  
**Hct:** 42%  
**Platelets:** 395,000
Electrolyte Results

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Na</td>
<td>140</td>
</tr>
<tr>
<td>K</td>
<td>4.2</td>
</tr>
<tr>
<td>Cl</td>
<td>101</td>
</tr>
<tr>
<td>HCO</td>
<td>23</td>
</tr>
<tr>
<td>BUN</td>
<td>17</td>
</tr>
<tr>
<td>Cr</td>
<td>0.9</td>
</tr>
<tr>
<td>Glu</td>
<td>77</td>
</tr>
</tbody>
</table>
For Geriatric Scenario #5

**Urinalysis Results**

- **Specific Gravity:** 1.013
- **pH:** 6.9
- **Protein:** Trace
- **Glucose:** None
- **Blood:** None
- **Ketones:** None
- **WBC:** 0-5
- **RBC:** None
- **Epi:** 20-30
- **Bacteria:** None

**Urine Drug Screen Results**

Negative
For Geriatric Scenario #5

Cardiac Enzyme Results

CPK: 122
CK-MB: 2.3
Troponin: 0.3
For Geriatric Scenario #5

**PT/INR Results**

PT: 11.0

INR: 0.9