#### History

Identifying Data: Full Name: MT Address: Flushing, NY Date & Time: November 02, 2020 at 04:14 PM Location: New York-Presbyterian Queens Source of Information: EMS, Patients Friend and Daughter Source of Referral: Patient's Friend activated EMS

<u>Chief Complaint:</u> right sided weakness and inability to speak x 45 minutes, stroke call was activated by EMS at 4:12 PM.

#### History of Present Illness:

Patient is 71 y/o AA female with PMHx of obesity and HTN who presents to the ED with acute onset of right-sided weakness, and AMS. As per EMS, patient was sitting and having lunch with a friend around 3:30pm when suddenly she stopped moving, rolled up her eyes and was having shaking movement of her arms and legs. She was then lowered to the floor to prevent fall and trauma. EMS reports that upon arrival patient's BP was 180/120, and FS 114 patient was not having any shaking movements, was lying on the floor with opened eyes, mute, and not following commands.

In the emergency room, the stroke team evaluated her at 4:14pm. She was awake, with forced left gaze deviation, mute, right hemispatial neglect, right facial weakness and unable to follow some commands. Further history was obtained from the patient's daughter. At baseline, patient is normally ambulatory, A&Ox3, and fully functional/independent with a modified Rankin scale of 1. She was last known well, just prior to the onset of symptoms at 3:30pm.

<u>Past Medical History</u>: HTN Obesity Childhood illnesses – Unknown Immunizations – Unknown Screening tests and results: Unknown

Past Surgical History: C-section x2

Medications:

Unable to obtain, as per daughter patient takes a medication for BP control and is compliant. Denies past/ present herbal or vitamin use.

Allergies:

Denies any known drug, environmental or food allergies.

Family History:

No significant history of early cardiovascular disease or stroke in immediate family members.

<u>Social History:</u> Mrs. MT is an AA married female, who lives with her husband and daughter. She works as a Home Health Aide. Habits –Patients family denies any history of smoking cigarettes, past or present and denies any past/present alcohol or illicit drug use. Unable to obtain further information as per patient's status.

<u>Review of Systems:</u> Unable to obtain ROS due to patient's mental status.

# Physical

<u>Vital Signs:</u> Height: 5 ft 7 in Weight: 98 kg BMI: 24.21 Pulse Oximetry: 92% - room air RR: 26 bpm Pulse: 106 Temperature: 98.1 F - oral BP: 216/134 – laying down FS: 143

<u>General:</u> 71-year-old AA female, obese, in acute distress apparent distress. Awake, not alert; but arousable by minor stimulation, looks younger than her stated age of 71.

<u>Skin:</u> warm & dry. Nonicteric, no lesions noted, no scars, tattoos, erythema, swelling, bruises, or masses. <u>Nails</u>: no clubbing noted, capillary refill <2 seconds throughout. <u>Head</u>: normocephalic, atraumatic.

<u>Eyes</u>: Eyes opened with left gaze deviation, right hemianopsia with profound neglect, sclera white; conjunctiva pink & cornea clear. PERRLA. Unable to assess full Visual fields or EOMs.

Mouth: moderate amount of food in mouth.

Neck: Trachea midline. No masses, lesions, scars, pulsations noted. No thyromegaly.

<u>Chest</u>: Symmetrical, no obvious deformities, no evidence trauma. No paradoxical respirations or use of accessory muscles noted.

Lungs: Clear to auscultation bilaterally. No adventitious sounds noted.

Heart: Tachycardic, There are no JVD, no murmurs, S3, S4, splitting of heart sounds, friction

rubs or other extra sounds. Carotid pulses are 2+ bilaterally without bruits.

<u>Abdomen:</u> obese, no evidence of scars, striae, caput medusae or abnormal pulsations. BS present in all 4 quadrants. No bruits noted over aortic/renal/iliac/femoral arteries.

Female Genital: Genital and rectal deffered

Anus, Rectum, and Prostate: Exam deferred

Musculoskeletal System – Upper/Lower Extremity:

No soft tissue swelling, erythema, ecchymosis, atrophy, or deformities in bilateral upper and lower extremities. Strength 0/5 in RUE and RLE. No movement of the R extremities. 5/5 Strength on the left side. Patient moves LUE and LLE spontaneously.

Peripheral Vascular:

The extremities are unremarkable in color, size and temperature. D/P and Radial Pulses are 2+ bilaterally. No clubbing, cyanosis or edema noted bilaterally. No stasis changes or ulcerations noted.

<u>Neurological</u>: Not alert; but arousable by minor stimulation. <u>Motor/Cerebellar</u>: Unable to assess. <u>Sensory</u>: Unable to assess.

# **NIH Stroke Scale:**

 $\cdot$  1a. Level of Consciousness (1) Not alert; but arousable by minor stimulation to obey, answer, or respond.

· 1b. LOC Questions: (2) Answers neither question correctly.

· 1c. LOC Commands: (2) Performs neither task correctly.

 $\cdot$  2. Best Gaze: (2) Forced deviation, or total gaze paresis not overcome by the oculocephalic maneuver.

 $\cdot$  3. Visual: (2) Complete hemianopia.

· 4. Facial Palsy: (2) Partial paralysis (total or near-total paralysis of lower face).

• 5a. Right Arm Motor (4) No movement.

· 5b. Left Arm Motor (0) No drift; limb holds 90 (or 45) degrees for full 10 seconds.

· 6a. Right Leg Motor (4) No movement.

 $\cdot$  6b. Left Leg Motor (0) No drift; leg holds 30-degree position for full 5 seconds.

· 7. Limb Ataxia: (0) Absent.

 $\cdot$  8. Sensory: (1) Mild-to-moderate sensory loss; patient feels pinprick is less sharp or is dull on the affected side; or there is a loss of superficial pain with pinprick, but patient is aware of being touched.

• 9. Best Language: (3) Mute, global aphasia; no usable speech or auditory comprehension.

 $\cdot$  10. Dysarthria: (2) Severe dysarthria; patient's speech is so slurred as to be unintelligible in the absence of or out of proportion to any dysphasia, or is mute/anarthric.

 $\cdot$  11. Extinction and Inattention (formerly Neglect): (2) Profound hemi-inattention or extinction to more than one modality; does not recognize own hand or orients to only one side of space.

· Total Score 27

# LAB WORK:

CT HEAD: No hemorrhage. Dense MCA sign on the left.

CTA HEAD/Neck: Left mid to distal M1 occlusion.

#### Assessment:

71-year-old woman with PMHx of hypertension and obesity. Last known well at 3:30 PM, and noted immediately afterwards to have shaking and looking upwards. In the emergency room, neurological exam significant for right hemispatial neglect, global aphasia, right facial weakness, right hemiplegia. Patient was agitated, and the emergency room attending ordered Versed 5 mg IV. CT head with dense MCA sign on the left. CT angiography with left M1 occlusion. LVO activated.

# <u>Plan:</u>

- 1) Cerebrovascular accident: Left MCA syndrome with left M1 occlusion
- Information obtained from the daughter, who denies patient had history of recent head trauma, fever/chills, bleeding, history of thrombocytopenia, recent surgery or neoplasm. The potential benefits and risks of TPA were discussed with the family, who verbalized understanding and agreed with treatment plan.
- On return from CT, blood pressure was approximately160's. A 9 mg bolus of TPA was given at 4:49pm, followed by an IV infusion of 8z cc over 1 hour.
- Transfer to cath lab for immediate thrombectomy.
- Cardiac monitor.
- TTE ordered. Mechanism of stroke is likely cardioembolic. High index of suspicion for occult paroxysmal atrial fibrillation.
- Admit to ICU post-thrombectomy
- Neuro checks and BP and HR q15' x 2 hrs, then q30' x 6 hrs, then q 1 hr x 16 hrs, then q 8 hrs
- No anti-thrombotic medications
- Non-contrast Head CT at 24 hrs after completion of IV tPA infusion (November 3 at 6 PM) (can cancel if MRI done between 20-24 hrs after completion of IV tPA infusion)
- MRI Brain without Gad (preferably between 2 PM and 6 PM on November 3)
- Lipid profile/LFTs/HbA1c; CBC, BMP, PT/INR in AM

- 2) HTN
- Labetalol 20 mg x 1 was given
- Start Nicardipine drip.
- An arterial line placed for BP monitoring. with post TPA target blood pressure of 150–180/75–105
- 3) Airway Management
- On return from CT to the trauma room, patient was obtunded, and unable to protect her airway. Finger sweep performed to clear airway of food. As such, she was intubated.
- Initiate Propofol for sedation.
- 4) Probable seizure at onset
- Keppra 1 g IV was given, then continue Keppra 1.5 g every 12 hours.
- Routine or 1 hour EEG
- 5) DVT prophylaxis
- Sequential Compression Device only
- 6) PT / OT evaluation
- 7) Ethics: Full Code

Case discussed with PA Valentina and Dr. Yasen