



7/29/24 Morning Report with @CPSolvers



"One life, so many dreams" Case Presenter: Kuchal Agadi (@AgadiKuchal) Case Discussants: John Woller (@) and Areeb Masood (@areebmasoodMD)

CC: Altered mental status

HPI: 67 male was brought for AMS. Patient denies prior health problem, unclear last normal, no history. Doesn't remember why he went to his PCP who referred him to the ER for evaluation.

No LOC, SOB, Fever, cough seizure, limb weakness palpitation. No hx of getting lost.

PMH: HTN, DT2

Meds:

Fam Hx: From Russia

Soc Hx: Smoker Alcohol use

Health-Related Behaviors:

Allergies: Denied

Vitals: T: 36.8 HR: 75 BP: 208/181 → 175/92 RR:

Exam:

Gen: Alert, oriented x2, not in distress, well nourished

CV: systolic murmur second costal space

Pulm: non labor breathing

Neuro: CN2 :equal, reactive, CN 3,4, 6, 8,9: Normal, CN7:Facial asymmetry, R nasolabial fold flattening. R side wrinkles fainter than the L. R eye closure weaker than the L, weakened ability to puff the R cheek, Mouth deviated to the L when smiling

Reflexes: bilateral, flexor response, Sensory : normal

Motor: Power: wnl, reflexes : 2\4 throughout, Bilateral flexor Plantar response

Extremities/skin: no edema, no pressure, no rashes

Notable Labs & Imaging:

Hematology: WBC: 6.5 Hgb 16.9, HCT: 48.5 : Plt: 215

Chemistry:

Na: 138 K:3.4 Cl: HCO3:23 BUN:15 Cr:1.6 glucose: 133 HA1C : 6.1, TSH: 2.706

Imaging:

EKG: Normal sinus rhythm, no ST elevation

CT Head: Normal

MRI: 2 punctate foci of acute ischemia, with L parietal lobe. Generalized parenchymal atrophy; advanced small vessel ischemic changes, few scattered punctate areas of susceptibility of prior micro hemorrhages.

Echo : mild LA dilated, mild LVH with septal wall motion, moderate atherosclerosis of the aorta, no endocarditis, Pulmonary pressure normal EF : 65-70

TEE : Shunt across PFO, no intramural thrombus

Carotid duplex : unremarkable

CT Angio neck : LVA narrowed by 75%

CT Angio head\brain: Ectasia vs aneurysm at the tip of basilar artery (6mm) and acute occlusion of intracranial portion of the Left Vertebral Artery

Dx: Cryptogenic Stroke

Problem Representation: 67M came with AMS, high BP and abnormal CN7 exam. Imaging showed normal CT scan, no sign of stroke on MRI and a PFO shunt on TEE.

Teaching Points (Parisa):

AMS: MIST; metabolic (electrolyte sugar, thyroid; Infection(meningitis, encephalitis/inflammatory; structural(mass occupying; Toxins(substance) → stroke (image neg) seizure prolonged postictal phase; constipation; urinary retention (PVR/bladder percussion) **PLUS** who is the patient; prior episodes; history MS/strokes. → Make sure stroke justify AMS

Tx before Dx ; 1)urgent intervention → **Breathing tube** (intubation GCS<8); **reversal agent** (naloxone); **Glc** (point of care test) → 2)neuroexam stroke structural; focal deficits; brainstem pupil gag reflex; NIH stroke score → 3)collateral (family members information); detailed neuro exam. (tone; reflex)

Hypertensive encephalopathy: ophthalmoscope check for retinopathy → white matter changes (MRI >> CT); Elevated BP in AMS requires neurological exam. When not know last normal we do not start TPA: normal CTA does not exclude stroke. **Stroke etiologies:** intracranial ATH; embolic (higher risk of occurrence, clot) Entire facial palsy: peripheral palsy vs sparing forehead central **UMN exam:** pronator drift(contralat); orbit sing(contralat)

Brain MRI: What are we looking for; cortical vs subcortical; DWI- ADC older bright, new infarct dark, FLAIRE correlating; location matching presentation; midline shift → Stroke: embolic; ischemic; TIA.

Brain microhemorrhage → Microvascular dx lacunar infarct; uncontrolled BP, cerebral amyloid angiopathies not connected to systemic increasing risk of future ICH is higher,

Embolic right side heart to brain: shunt across PFO, echo w/ bubble study vs Central embolic (AF; aortic aneurysm; dec EF; carotid bruit) Paradoxical: larger territory vs carotid/ large vessels clinically worse picture (MCA occipital)Embolic w/o source (AF/clot) not anticoagulation → Holter Monitor **Stroke Management:** neurology; anticoagulation(DVT presence); ; risk factor modification; BP/DM/ anti sclerotic (statins); Stabilizing patient (Postural; temperature; swallowing)

Pearls: Limitation of carotid duplex (CTA/MRI more instructive); language accordant care; shared decision making.