

Brain Death Determination Workshop
Clinical Examination, Case A
Resident Handout

HPI:

Ms. KM is an 84-year-old woman with HTN, HLD, NIDDM2, and stage 2 breast adenoCA s/p lumpectomy, chemoXRT who has been living at a nursing facility for the past month after having fallen at home and sustaining a femoral fracture. She was found to have a DVT while in the hospital and was started on therapeutic enoxaparin.

Her last known normal was last night (Thursday) after dinner, around 19:00. Her nursing aide noticed she was sleepier than usual when given her nightly medications. She usually complained about her enoxaparin injections, but last night, she didn't even flinch during the injection. This morning, around 09:00, she was unable to be roused for her morning pills and was breathing agonally. A code was called at the nursing home. EMS arrived. She had a pulse and perfusing rhythm, and was not noted to have sustained a cardiac arrest. She was intubated her for airway protection. She was started on propofol gtt. She was brought to the ED and a pre-hospital stroke activation sent.

In the ED, whole-body imaging is obtained. A non-contrast head CT reveals a large mixed-density right putaminal IPH with intraventricular extension, with 2cm of midline shift as well as uncal herniation. Neurosurgery is consulted and deems her to not be a surgical candidate. She is admitted to the NCCU.

Propofol is discontinued. Her pupillary, corneal, and gag reflexes are absent. Repeat head CT 6 hours later shows an increase in size of the IPH and enlargement of the left lateral ventricle, concerning for progressive ventricular entrapment, as well as worsening diffuse sulcal effacement, loss of gray-white differentiation, and pontine hemorrhages. You are called to perform brain death testing.

Medical History:

HTN
HLD
NIDDM2
Stage 2 breast adenoCA (2000) s/p lumpectx,
chemoXRT
DVT (2025), on therapeutic enoxaparin

Surgical History:

Breast adenoCA s/p lumpectx

Current Medications:

Atorvastatin 10mg qhs
Famotidine 20mg bid

Allergies:

NKDA

Physical Exam:

Vitals: BP 114/68 (MAP 83), HR 92, RR 12, SpO2 99%, T 35.6C

General: Intubated elderly woman.

HEENT: Normocephalic. Anicteric sclerae. Orotracheal intubation.

CV: RRR. Normal S1, S2. No r/m/g. No adventitious lung sounds. No paradoxical chest movements. Breathing at the set ventilator rate.

Abd: Soft, NT/ND.

Neurologic Exam:

MSE: Not on sedation. No response to verbal or noxious stimuli. Does not blink to threat.

CN: Eyes closed. No roving eye movements. Pupils 5mm, non-reactive bilaterally. Corneal reflex absent bilaterally. Oculocephalic reflex absent bilaterally. Cough and gag reflexes absent bilaterally.

Motor/Sensory: No motor response to noxious stimuli in the upper extremities. Triple flexion response to noxious stimulus in the right leg; absent in the left.

Labs:

WBC 10.8, Hb 10.9, Plt 126
Na 145, K 3.9, Cl 104, HCO3 25, BUN 20, Cr 1.01, gluc 146