Rotation 2- Emergency Medicine
HPI #1

History

Identifying Data:
Name: C. Ramirez
Address: Flushing, NY
DOB: 3/17/1982
Date and Time: 2/9/22
Location: NYPQH
Source of Information: Mother
Reliability: Reliable
Source of Referral: Self

Chief Complaint: "I'm tired"

History of Present Illness: 40 year old gentleman with newly diagnosed diabetes mellitus and osteomyelitis is brought to the ER after a syncopal episode in the hospital cafeteria. The trauma team aroused him on scene using oxygen therapy and a sternal rub. The patient still appeared to be disoriented and stated that he was tired when asked how he was feeling. His mother states he took two doses of insulin on an empty stomach prior to his syncopal episode. She also states that this has never happened to him in the past. The patient was brought to the ER and monitored for several hours. He is hypothermic, and denies chest pain, shortness of breath, cough, nausea, or vomiting.

Past Medical History
Denies childhood illness
Immunizations- up to date

Past Surgical History
Amputation of left hallux- 2021

Medications
Lantus 10 mL vial qd
NovoLog injection 100U/mL to be taken with meals

Allergies
No known drug allergies

Family History
Mother: alive
Father: unknown

Social History

C. Ramirez is a single gentleman, living by himself. He socially drinks 1 glass of wine on the weekends. Denies present and past tobacco use. Drinks 1 cup of coffee a day

Travel- He has not traveled recently

Diet- His diet consists of carbohydrates and fried foods. States he has been trying to incorporate more vegetables

Exercise- He does not exercise regularly

Sexual Hx- He is heterosexual, but has not been sexually active in the past year. He denies ever having an STD

Review of Systems

General- Admits to fatigue and weakness. Denies recent weight loss or gain, loss of appetite, fever or chills, or night sweats
Skin, hair, nails- Denies changes in texture, excessive dryness or sweating, discolorations, pigmentations, moles, rashes, pruritus, or changes in hair distribution
Head- denies headaches, dizziness or head trauma
Eyes- Denies visual disturbances. Does not wear glasses.
Ears: Denies tinnitus or hearing changes
Nose/Sinuses- Denies obstruction, post nasal drip or epistaxis
Mouth/throat- Denies bleeding gums, sore throat, sore tongue, mouth ulcers, voice changes or use of dentures.
Neck: Denies swelling, tenderness, pain or difficulty swallowing
Pulmonary system- Denies dyspnea. Denies cough, sputum production, wheezing, hemoptysis, or orthopnea.
Cardiovascular system- Admits to syncope and edema in legs. Denies palpitations and diaphoresis, chest pain, or hypertension.
Gastrointestinal system- Has regular bowel movements daily. Denies change in appetite, intolerance to specific foods, nausea, vomiting, dysphagia, pyrosis, unusual flatulence or eructation, abdominal pain, diarrhea, jaundice, constipation, rectal bleeding or blood in stool.
Genitourinary system- Denies urinary frequency or urgency, nocturia, oliguria, polyuria, dysuria, incontinence, awakening at night to urinate or flank pain
Nervous- Admits to weakness and loss of consciousness. Denies seizures
Musculoskeletal system- Denies muscle/ joint pain, deformity or swelling, redness or arthritis
Peripheral vascular system- Denies intermittent claudication, coldness or trophic changes, varicose veins, peripheral edema or color changes
Hematological system- Denies anemia, easy bruising or bleeding, lymph node enlargement, blood transfusion, or history of DVT/PE
Endocrine system- denies polyuria, polydipsia, polyphagia, heat or cold intolerance, excessive sweating, hirsutism, or goiter
Psychiatric- Denies depression/ sadness, anxiety.

BP:	R	L		R:	16 breaths/min, unlabored
Seated	112/72	118/74		P:	65 beats/min, regular
Supine	112/70	120/78		T:	96 degrees F (oral)
Height 70 inches		Weight 150 lbs.	BMI: 21	O2 Sat: 98% Room air	

General: Patient is disoriented and not alert. Patient's face appears to be swollen. Appears stated age.

Skin: Warm & moist, good turgor. Nonicteric, no lesions noted, no scars, tattoos.

Hair: Average quantity and distribution.

Nails: No clubbing, capillary refill <2 seconds in upper and lower extremities

Head: Normocephalic, atraumatic, non tender to palpation throughout

Ears: Symmetrical and appropriate in size. No lesions/masses / trauma on external ears. No discharge / foreign bodies in external auditory canals AU. TM's pearly white / intact with light reflex in good position AU. Auditory acuity intact to whispered voice AU. Weber midline / Rinne reveals AC>BC AU. Negative Dix Hallpike maneuver
Nose: Symmetrical / no masses / lesions / deformities / trauma / discharge. Nares patent bilaterally / Nasal mucosa pink & well hydrated. No discharge noted on anterior rhinoscopy. Septum midline without lesions / deformities / injection / perforation. No foreign bodies.

Sinuses: Non tender to palpation and percussion over bilateral frontal, ethmoid and maxillary sinuses.

Eyes: Symmetrical OU. No strabismus, exophthalmos or ptosis. Sclera white, cornea clear, conjunctiva pink. Visual acuity uncorrected - 20/20 OS, 20/20 OD, 20/20 OU. Visual fields full OU. PERRLA, EOMs intact with no nystagmus.

Fundoscopy: Red reflex intact OU. Cup to disk ratio <0.5 OU. No AV nicking, hemorrhages, exudates or neovascularization OU.

Lips: Pink, moist; no cyanosis or lesions. Non-tender to palpation.

Mucosa: Pink ; well hydrated. No masses; lesions noted. Non-tender to palpation. No leukoplakia.

Palate: Pink; well hydrated. Palate intact with no lesions; masses; scars. Non-tender to palpation; continuity intact.
Teeth: Good dentition. No obvious dental caries noted.

Gingivae: Pink; moist. No hyperplasia; masses; lesions; erythema or discharge. Non-tender to palpation.

Tongue: Pink; well papillated; no masses, lesions or deviation. Non-tender to palpation.

Oropharynx: Well hydrated; no injection; exudate; masses; lesions; foreign bodies. Tonsils present with no injection or exudate (give grade of tonsils). Uvula pink, no edema, lesions

Neck: Trachea midline. No masses; lesions; scars; pulsations noted. Supple; non-tender to palpation. FROM; no stridor noted. 2+ Carotid pulses, no thrills; bruits noted bilaterally, no cervical adenopathy noted.

Thyroid: Non-tender; no palpable masses; no thyromegaly; no bruits noted

Chest: Symmetrical, no deformities, no trauma. Respirations unlabored / no paradoxical respirations or use of accessory muscles noted. Lat to AP diameter 2:1. Non-tender to palpation throughout.

Lungs: Clear to auscultation and percussion bilaterally. Chest expansion and diaphragmatic excursion symmetrical. Tactile fremitus symmetric throughout. No adventitious sounds.

Heart: Cardiac ultrasound was performed, which showed signs of slight pericardial effusion and hypertrophy. JVP is 2.5 cm above the sternal angle with the head of the bed at 30°. PMI in 5th ICS in mid-clavicular line. Carotid pulses are 2+ bilaterally without bruits. Regular rate and rhythm (RRR). S1 and S2 are distinct with no murmurs, S3 or S4. No splitting of S2 or friction rubs appreciated.

Abdomen: Abdomen slightly distended and symmetric with no scars, striae or pulsations noted. Bowel sounds normoactive in all four quadrants with no aortic/renal/iliac or femoral bruits. Non-tender to palpation and tympanic throughout, no guarding or rebound noted. Tympanic throughout, no hepatosplenomegaly to palpation, no CVA tenderness appreciated

Genitalia: Uncircumcised male; prepuce mobile and retractable. No penile discharge or lesions noted. No scrotal swelling or discoloration. Testes descended bilaterally; right testicle smooth; 1x1 firm nodule on left lateral testicle which is fixed and nontender. Epididymis nontender. No inguinal or femoral hernias noted.

Rectal: No perirectal lesions or fissures. External sphincter tone intact. Rectal vault without masses. Prostate smooth and non-tender with palpable median sulcus

No nuchal rigidity noted. Brudzinski's and Kernig's signs negative

CN I Correctly identified coffee and mint odors bilaterally

CNII Visual fields full by confrontation, visual acuity 20/200 OD, 20/100 OS, uncorrected, red reflex present, cream colored discs with sharp borders, no hemorrhages, exudates or crossing phenomena
CNIII, IV, & VI Extraocular movements intact, pupils 3mm OU and reactive to direct and consensual light and accommodation, no ptosis

CN V Face sensation intact bilaterally, corneal reflex intact, jaw muscles strong without atrophy

CN VII Correctly identified sweet, salt and sour tastes (bitter not tested), facial expressions intact, clearly enunciate words

CN VIII Repeats whispered words at 2 feet bilaterally, Weber – no lateralization, Rinne – AC>BC

CN IX and X No hoarseness, uvula midline with elevation of soft palate, gag reflex intact, no difficulty swallowing

CN XI Full range of motion at neck with 5/5 strength and strong shoulder shrug

CN XII Tongue midline without fasciculations, good tongue strength

Motor/Cerebellar: Full active/passive ROM of all extremities without rigidity or spasticity. Symmetric muscle bulk with good tone. No atrophy, tics, tremors or fasciculation. Strength 5/5 throughout. Rhomberg negative, no pronator drift noted. Gait steady with no ataxia. Tandem walking and hopping show balance intact. Coordination by rapid alternating movement and point to point intact bilaterally, no asterixis

Sensory: Intact to light touch, sharp/dull, and vibratory sense throughout. Proprioception, point localization, extinction, stereognosis, and graphesthesia intact bilaterally

Meningeal signs: No nuchal rigidity noted. Brudzinski's and Kernig's signs negative

Reflexes:

Normal: 2+ throughout, negative Babinski, no clonus appreciated
Abnormal: (document fully as follows):

	R	L		R	L
Brachioradialis	2+	2+	Patellar	2+	2+
Triceps	2+	2+	Achilles	2+	2+
Biceps	2+	2+	Babinskineg	neg	
Abdominal	2+/2+	2+/2+	Clonus	negative	

Peripheral vascular: Pitting edema in legs bilaterally. Pulses are 2+ bilaterally in upper and lower extremities. No bruits noted. No clubbing or cyanosis.

Musculoskeletal: No soft tissue swelling / erythema / ecchymosis / atrophy / or deformities in bilateral upper and lower extremities. Full active range of motion with no crepitus in all upper and lower extremities bilaterally. Full spinal range of motion with no deformities.

Mental Status Exam
Appearance: The patient’s appearance was normal, clean clothing, appears stated age
Attitude: the patient’s attitude towards the evaluator was calm
Movement: The patient’s movements were calm, no atypical movements
Affect: The patient appeared disoriented and anxious
Mood: The patient’s mood was apathetic
Speech: The patient’s speech was audible and tone was varied
Sensorium: Patient was A & O x 3
Attention and Concentration: The patient’s attending skills and concentration were clouded, dazed, distracted
Thought of contents; The patient’s thought contents were characterized by poverty of thought
Form of thoughts: The patient’s form of thought was characterized by coherent; concrete; derailment; disordered thoughts
Perception: The patient’s perception were characterized as depersonalization
Intellect: The patient’s mental ability was estimated as above average based on prior work history and education
Memory: The patient’s memory was characterized by STM impaired, LTM intact
Insight: The patient’s insight into her illness was being estimated as being limited
Judgement: The patient’s judgement was estimated as being dubious impaired inaccurate lacking

Assessment

40 year old gentleman with PMH of diabetes mellitus and osteomyelitis is brought to the ER after a syncopal episode

Differential diagnosis
Insulin overdose

CHF (patient has pitting edema, and slight pericardial effusion upon ultrasound)

Myxedema Coma (patient's face and limbs are swollen, patient is hypothermic and lethargic)

Plan

Insulin overdose- IV dextrose and electrolyte infusion, monitor patient, educate patient on proper insulin usage, refer to endo to have patient followed for diabetes mellitus

CHF- send patient for ECHO and stress test, refer to cardiac if diagnostic testing shows signs of heart failure

Myxedema Coma- treat patient with IV Levothyroxine and conduct a thyroid panel to see if there is elevated TSH and decreased T3, T4

Osteomyelitis- follow up with ortho

Rotation 2- Emergency Medicine
HPI #3

History

Identifying Data:
Name: B. Singh
Address: Flushing, NY
DOB: 1/1/1962
Date and Time: 2/17/22
Location: NYPQH
Source of Information: Husband/ Son
Reliability: Reliable
Source of Referral: Husband

Chief Complaint: " My wife would not wake up this morning"

History of Present Illness: 60 year old woman with PMH of hypertension, hyperlipidemia, hypothyroidism brought in by emergency medical services for altered mental status for the past two weeks. The patient has been having multiple episodes of falls for the past two weeks and has been falling more at home. Today the patient was difficult to arouse, and her husband called the ambulance. Her glucose level was 40 mg/dL upon EMS arrival, and she was given D50 en route to the ER. Denies chest pain, n/v/d, fever, or shortness of breath

Past Medical History
CHF
Anxiety
Diabetes
Hypothyroidism
Glaucoma
Hypertension
Denies childhood illnesses
Immunizations- Up to date

Past Surgical History
No hx of prior surgeries

Medications
Atorvastatin 80 mg qd
Bisoprolol fumarate 10 mg qd
Simbrinza 1-0.2%
Vitamin D2
Felodipine 5 mg tablets qd
Glyburide/ Metformin 2.5/500 mg qd

Basaglar Kwikpen 100U
B-D Nano 2nd gen pen
Isosorbide dinitrate 20 mg qd
Latanoprost .005%
Levothyroxine .025 mg qd
Entresto 97 mg qd

Allergies
No known drug allergies

Social History
Was not able to obtain social history, as the patient was not conscious upon arrival

Review of Systems ***(was unable to conduct ROS interview because patient was not conscious upon arrival)***

General- Admits to fatigue, night sweats and weakness. Denies weight gain or weight loss, loss of appetite, fever or chills.
Skin, hair, nails- Denies changes in texture, excessive dryness or sweating, discolorations, pigmentations, moles, rashes, pruritus, or changes in hair distribution
Head- denies headaches, dizziness or head trauma
Eyes- Denies visual disturbances. Does not wear glasses.
Ears: Denies tinnitus or hearing changes
Nose/Sinuses- Denies obstruction, post nasal drip or epistaxis
Mouth/throat- Admits to sore throat and hoarseness. Denies bleeding gums, mouth ulcers or use of dentures.
Neck: Admits to pain and swelling anteriorly
Pulmonary system- Denies dyspnea. Denies cough, sputum production, wheezing, hemoptysis, or orthopnea.
Cardiovascular system- Denies palpitations, diaphoresis, chest pain, or hypertension.
Gastrointestinal system- Has regular bowel movements daily. Denies change in appetite, intolerance to specific foods, nausea, vomiting, dysphagia, pyrosis, unusual flatulence or eructation, abdominal pain, diarrhea, jaundice, constipation, rectal bleeding or blood in stool.
Genitourinary system- Denies urinary frequency or urgency, nocturia, oliguria, polyuria, dysuria, incontinence, awakening at night to urinate or flank pain
Nervous- Denies loss of consciousness or seizures
Musculoskeletal system- Denies muscle/ joint pain, deformity or swelling, redness or arthritis
Peripheral vascular system- Denies intermittent claudication, coldness or trophic changes, varicose veins, peripheral edema or color changes
Hematological system- Admits to anterior cervical lymph node enlargement. Denies anemia, easy bruising or bleeding, blood transfusion, or history of DVT/PE
Endocrine system- Admits to heat intolerance and night sweats 3-4x a week for the last 3 weeks. Denies polyuria, polydipsia, polyphagia, hirsutism, or goiter
Psychiatric- Denies depression/ sadness, anxiety.

BP:	R	L		R:	22 breaths/min, shallow
Seated	N/A	N/A		P:	40 beats/min, regular
Supine	192/78	192/78		T:	94 degrees F (rectal)
Height 64 inches		Weight 199.8 lbs.	BMI: 36.61	O2 Sat: 90% Room air	

General: Patient is disoriented and not alert. Patient's face appears to be swollen. Appears stated age.

Skin: Cold and dry, good turgor. Nonicteric, no lesions noted, no scars, tattoos.

Hair: thinning hair, average distribution.

Nails: No clubbing, capillary refill <2 seconds in upper and lower extremities

Head: Normocephalic, atraumatic, non tender to palpation throughout

Ears: Symmetrical and appropriate in size. No lesions/masses / trauma on external ears. No discharge / foreign bodies in external auditory canals AU. TM's pearly white / intact with light reflex in good position AU. Auditory acuity intact to whispered voice AU. Weber midline / Rinne reveals AC>BC AU. Negative Dix Hallpike maneuver
Nose: Symmetrical / no masses / lesions / deformities / trauma / discharge. Nares patent bilaterally / Nasal mucosa pink & well hydrated. No discharge noted on anterior rhinoscopy. Septum midline without lesions / deformities / injection / perforation. No foreign bodies.

Sinuses: Tender to palpation and percussion over bilateral maxillary sinuses

Eyes: Symmetrical OU. No strabismus, exophthalmos or ptosis. Sclera white, cornea clear, conjunctiva pink. Visual acuity uncorrected - 20/20 OS, 20/20 OD, 20/20 OU. Visual fields full OU. PERRLA, EOMs intact with no nystagmus.

Fundoscopy: Red reflex intact OU. Cup to disk ratio <0.5 OU. No AV nicking, hemorrhages, exudates or neovascularization OU.

Lips: Pale, dry; no cyanosis or lesions. Non-tender to palpation.

Mucosa: Pink ; well hydrated. No masses; lesions noted. Non-tender to palpation. No leukoplakia.

Palate: Pink; well hydrated. Palate intact with no lesions; masses; scars. Non-tender to palpation; continuity intact.

Teeth: Good dentition. No obvious dental caries noted.

Gingivae: Pink; moist. No hyperplasia; masses; lesions; erythema or discharge. Non-tender to palpation.

Tongue: Pink; well papillated; no masses, lesions or deviation. Non-tender to palpation.

Oropharynx: Positive injection; No exudate; masses; lesions; foreign bodies. Tonsils not present. Uvula pink, no edema, lesions

Neck: Swelling of the neck bilaterally. Trachea midline. No masses; lesions; scars; pulsations noted. Supple; non-tender to palpation. FROM; no stridor noted. 2+ Carotid pulses, no thrills; bruits noted bilaterally

Thyroid: Non-tender; no thyromegaly; no bruits noted

Chest: Symmetrical, no deformities, no trauma. Respirations unlabored / no paradoxical respirations or use of accessory muscles noted. Lat to AP diameter 2:1. Non-tender to palpation throughout.

Lungs: Clear to auscultation and percussion bilaterally. Chest expansion and diaphragmatic excursion symmetrical. Tactile fremitus symmetric throughout. No adventitious sounds.

Heart: Cardiac ultrasound was performed, which showed signs of slight pericardial effusion and hypertrophy. JVP is 2.5 cm above the sternal angle with the head of the bed at 30°. PMI in 5th ICS in mid-clavicular line. Carotid pulses are 2+ bilaterally without bruits. Rate and rhythm was sinus bradycardia at 40 bpm. S1 and S2 are distinct with no murmurs, S3 or S4. No splitting of S2 or friction rubs appreciated.

Abdomen: Abdomen slightly distended and symmetric with no scars, striae or pulsations noted. Bowel sounds normoactive in all four quadrants with no aortic/renal/iliac or femoral bruits. Non-tender to palpation and tympanic throughout, no guarding or rebound noted. Tympanic throughout, no hepatosplenomegaly to palpation, no CVA tenderness appreciated

Genitalia: External genitalia without erythema or lesions. Vaginal mucosa pink without inflammation, erythema or discharge. Cervix parous (or multiparous), pink, and without lesions or discharge. No cervical motion tenderness. Uterus anterior, midline, smooth, non-tender and not enlarged. No adnexal tenderness or masses noted. Pap smear obtained. No inguinal adenopathy.

Rectal: Rectovaginal wall intact. No external hemorrhoids, skin tags, ulcers, sinus tracts, anal fissures, inflammation or excoriations. Good anal sphincter tone. No masses or tenderness. Trace brown stool present in vault. FOB negative.

No nuchal rigidity noted. Brudzinski's and Kernig's signs negative

CN I Correctly identified coffee and mint odors bilaterally

CNII Visual fields full by confrontation, visual acuity 20/200 OD, 20/100 OS, uncorrected, red reflex present, cream colored discs with sharp borders, no hemorrhages, exudates or crossing phenomena
CNIII, IV, & VI Extraocular movements intact, pupils 3mm OU and reactive to direct and consensual light and accommodation, no ptosis

CN V Face sensation intact bilaterally, corneal reflex intact, jaw muscles strong without atrophy

CN VII Correctly identified sweet, salt and sour tastes (bitter not tested), facial expressions intact, clearly enunciate words

CN VIII Repeats whispered words at 2 feet bilaterally, Weber – no lateralization, Rinne – AC>BC

CN IX and X No hoarseness, uvula midline with elevation of soft palate, gag reflex intact, no difficulty swallowing

CN XI Full range of motion at neck with 5/5 strength and strong shoulder shrug

CN XII Tongue midline without fasciculations, good tongue strength

Motor/Cerebellar: Full active/passive ROM of all extremities without rigidity or spasticity. Symmetric muscle bulk with good tone. No atrophy, tics, tremors or fasciculation. Strength 5/5 throughout. Rhomberg negative, no pronator drift noted. Gait steady with no ataxia. Tandem walking and hopping show balance intact. Coordination by rapid alternating movement and point to point intact bilaterally, no asterixis

Sensory: Intact to light touch, sharp/dull, and vibratory sense throughout. Proprioception, point localization, extinction, stereognosis, and graphesthesia intact bilaterally

Meningeal signs: No nuchal rigidity noted. Brudzinski's and Kernig's signs negative

Reflexes:

Normal: 2+ throughout, negative Babinski, no clonus appreciated
Abnormal: (document fully as follows):

	R	L		R	L
Brachioradialis	2+	2+	Patellar	2+	2+
Triceps	2+	2+	Achilles	2+	2+
Biceps	2+	2+	Babinskineg	neg	
Abdominal	2+/2+	2+/2+	Clonus	negative	

Peripheral vascular: +1 pitting edema bilaterally in lower extremities.. Pulses are 2+ bilaterally in upper and lower extremities. No bruits noted. No clubbing or cyanosis.

Musculoskeletal: No soft tissue swelling / erythema / ecchymosis / atrophy / or deformities in bilateral upper and lower extremities. Full active range of motion with no crepitus in all upper and lower extremities bilaterally. Full spinal range of motion with no deformities.

Mental Status Exam
Appearance: The patient’s appearance was normal, clean clothing, appears stated age
Attitude: the patient’s attitude towards the evaluator was calm
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Affect: The patient appeared disoriented and anxious
Mood: The patient’s mood was apathetic
Speech: The patient’s speech was audible and tone was varied
Sensorium: Patient was A & O x 3
Attention and Concentration: The patient’s attending skills and concentration were clouded, dazed, distracted
Thought of contents; The patient’s thought contents were characterized by poverty of thought
Form of thoughts: The patient’s form of thought was characterized by coherent; concrete; derailment; disordered thoughts
Perception: The patient’s perception were characterized as depersonalization
Intellect: The patient’s mental ability was estimated as above average based on prior work history and education
Memory: The patient’s memory was characterized by STM impaired, LTM intact

Insight: The patient's insight into her illness was being estimated as being limited
Judgement: The patient's judgement was estimated as being dubious impaired inaccurate lacking

Assessment

60 year old woman with PMH of hypertension, hyperlipidemia, hypothyroidism brought in by emergency medical services for altered mental status for the past two weeks

Differential

Myxedema Coma
Sepsis
Insulin overdose
CCB toxicity

Plan

Myxedema Coma

- Labs: Thyroid panel, CBC (to assess for anemia), BMP (to assess electrolyte levels), CPK (to assess if levels are elevated), ABG (to assess if patient is in respiratory acidosis, hypoxia or hypercapnia)
    - TSH: 165 (normal is 0.3-5.0)
    - T3 and T4 were both low (was unable to get exact values)
- Treat patient with Levothyroxine 200 micrograms IV, Hydrocortisone 100 mg IV every 8 hours, D5W and NaCl bolus, and antibiotics (Cefepime 2g IV and Vancomycin 1000 mg IV)

Sepsis

	OLD	NEW
SEPSIS	SIRS + Suspected Infection	**SUSPECTED/DOCUMENTED INFECTION** + **2 or 3 on qSOFA** (HAT): Hypotension (SBP ≤100 mmHg) AMS (GCS ≤13) Tachypnea (≥22/min) OR Rise in SOFA score by 2 or more
SEVERE SEPSIS	Sepsis + SBP <90 mmHg or MAP < 65 mmHg lactate > 2.0 mmol/L INR >1.5 or a PTT >60 s Bilirubin >34 µmol/L Urine output <0.5 mL/kg/h for 2 h Creatinine >177 µmol/L Platelets <100 ×109/L SpO2 <90% on room air	
SEPTIC SHOCK	SEPSIS + HYPOTENSION after adequate fluid resuscitation	**SEPSIS** + **VASOPRESSORS needed for MAP >65** mmHg + **LACTATE >2 mmol/L** after adequate fluid resuscitation

Based on patient's altered mental status and respiratory rate of 22 breaths per minute makes her a candidate for possible sepsis

- Labs: CBC (check for elevated WBC), ABG (Check for lactic acid), CK-MB, Troponin, Liver Panel (AST, ALT), blood glucose level
- Oxygen 6L via nasal cannula
- Normal Saline bolus
- IV antibiotics based on causative organism
- Measure I&Os- may need a catheter

Insulin Overdose

- Check Blood glucose level—insulin overdose leads to hypoglycemia
- Glucagon injection IV
- Fluid resuscitation with D5W
- Monitor patient

CCB toxicity (patient takes Felodipine)

- ECG: assess for sinus brady, AV block, bundle branch block, QT prolongation and junctional rhythms
- If rapid deterioration- may need intubation
- If no rapid deterioration, patient should be placed on continuous cardiac monitor and monitored closely
- Fluid resuscitation with IV crystalloids
- 10% CaCl 10-20ml with repeatec doses every 10-20 minutes via central line to avoid risk of skin necrosis on extravasation
- Can also give insulin 1 U/kg IV bolus followed by 1-10 U/kg/hour continuous infusion (CCBs reduce insulin secretion—insulin can help reverse metabolic derangement)

Rotation 2- Emergency Medicine
HPI #2

History

Identifying Data:
Name: D. Maleka
Address: Flushing, NY
DOB: 4/23/1995
Date and Time: 2/10/22
Location: NYPQH
Source of Information: Self
Reliability: Reliable
Source of Referral: Self

Chief Complaint: "I've been having a sore throat and swollen lymph nodes for a while now"

History of Present Illness: 26 year old woman with PMH of hyperthyroidism comes to the ER complaining of a sore throat and fatigue for the last 3 weeks. She notes swollen anterior cervical lymph nodes and admits to a minimal nonproductive cough. She states that 3 weeks ago, she had a fever, which has since resolved. Additionally, she admits to heat intolerance and night sweats up to 3-4x a week for the last 3 weeks. She also states she has been experiencing "brain fog" for months now, stating she has been feeling disoriented and has had a lack of focus. She has taken Advil, which has helped reduce her swelling. Recent COVID-19 test was negative. She has never had a strep test. The last time she had followed up with her endocrinologist regarding her hyperthyroidism was 1 year ago. Denies n/v/d, chest pain, or shortness of breath.

Past Medical History
Denies childhood illnesses
Immunizations- Up to date

Past Surgical History
Tonsillectomy- 2021

Medications
Advil 200mg 1-2 tablets PRN

Allergies
No known drug allergies

Social History
D. Maleka is a 26 year old female retail worker living with her partner. She drinks socially and denies present and past tobacco use. Drinks 1-2 cups of coffee a day
Travel- She has not traveled recently

Diet- Her diet is balanced, consisting of protein, vegetables, grains and fruit.
Exercise- she does not exercise regularly
Sexual Hx- She is heterosexual and is sexually active with one partner. She is not using protection. Her last LMP was 1/13. Denies hx of ever having an STD

Review of Systems

General- Admits to fatigue, night sweats and weakness. Denies weight gain or weight loss, loss of appetite, fever or chills.
Skin, hair, nails- Denies changes in texture, excessive dryness or sweating, discolorations, pigmentations, moles, rashes, pruritus, or changes in hair distribution
Head- denies headaches, dizziness or head trauma
Eyes- Denies visual disturbances. Does not wear glasses.
Ears: Denies tinnitus or hearing changes
Nose/Sinuses- Denies obstruction, post nasal drip or epistaxis
Mouth/throat- Admits to sore throat and hoarseness. Denies bleeding gums, mouth ulcers or use of dentures.
Neck: Admits to pain and swelling anteriorly
Pulmonary system- Denies dyspnea. Denies cough, sputum production, wheezing, hemoptysis, or orthopnea.
Cardiovascular system- Denies palpitations, diaphoresis, chest pain, or hypertension.
Gastrointestinal system- Has regular bowel movements daily. Denies change in appetite, intolerance to specific foods, nausea, vomiting, dysphagia, pyrosis, unusual flatulence or eructation, abdominal pain, diarrhea, jaundice, constipation, rectal bleeding or blood in stool.
Genitourinary system- Denies urinary frequency or urgency, nocturia, oliguria, polyuria, dysuria, incontinence, awakening at night to urinate or flank pain
Nervous- Denies loss of consciousness or seizures
Musculoskeletal system- Denies muscle/ joint pain, deformity or swelling, redness or arthritis
Peripheral vascular system- Denies intermittent claudication, coldness or trophic changes, varicose veins, peripheral edema or color changes
Hematological system- Admits to anterior cervical lymph node enlargement. Denies anemia, easy bruising or bleeding, blood transfusion, or history of DVT/PE
Endocrine system- Admits to heat intolerance and night sweats 3-4x a week for the last 3 weeks. Denies polyuria, polydipsia, polyphagia, hirsutism, or goiter
Psychiatric- Denies depression/ sadness, anxiety.

BP:	R	L		R:	16 breaths/min, unlabored
Seated	122/72	118/74		P:	65 beats/min, regular
Supine	122/70	120/78		T:	96 degrees F (oral)
Height 64 inches		Weight 120 lbs.	BMI: 2.26	O2 Sat: 98% Room air	

General: Patient is disoriented and not alert. Patient's face appears to be swollen. Appears stated age.

Skin: Warm & moist, good turgor. Nonicteric, no lesions noted, no scars, tattoos.

Hair: Average quantity and distribution.

Nails: No clubbing, capillary refill <2 seconds in upper and lower extremities

Head: Normocephalic, atraumatic, non tender to palpation throughout

Ears: Symmetrical and appropriate in size. No lesions/masses / trauma on external ears. No discharge / foreign bodies in external auditory canals AU. TM's pearly white / intact with light reflex in good position AU. Auditory acuity intact to whispered voice AU. Weber midline / Rinne reveals AC>BC AU. Negative Dix Hallpike maneuver
Nose: Symmetrical / no masses / lesions / deformities / trauma / discharge. Nares patent bilaterally / Nasal mucosa pink & well hydrated. No discharge noted on anterior rhinoscopy. Septum midline without lesions / deformities / injection / perforation. No foreign bodies.

Sinuses: Tender to palpation and percussion over bilateral maxillary sinuses

Eyes: Symmetrical OU. No strabismus, exophthalmos or ptosis. Sclera white, cornea clear, conjunctiva pink. Visual acuity uncorrected - 20/20 OS, 20/20 OD, 20/20 OU. Visual fields full OU. PERRLA, EOMs intact with no nystagmus.

Fundoscopy: Red reflex intact OU. Cup to disk ratio <0.5 OU. No AV nicking, hemorrhages, exudates or neovascularization OU.

Lips: Pink, moist; no cyanosis or lesions. Non-tender to palpation.

Mucosa: Pink ; well hydrated. No masses; lesions noted. Non-tender to palpation. No leukoplakia.

Palate: Pink; well hydrated. Palate intact with no lesions; masses; scars. Non-tender to palpation; continuity intact.

Teeth: Good dentition. No obvious dental caries noted.

Gingivae: Pink; moist. No hyperplasia; masses; lesions; erythema or discharge. Non-tender to palpation.

Tongue: Pink; well papillated; no masses, lesions or deviation. Non-tender to palpation.

Oropharynx: Positive injection; No exudate; masses; lesions; foreign bodies. Tonsils not present. Uvula pink, no edema, lesions

Neck: Bilateral anterior cervical adenopathy noted. Trachea midline. No masses; lesions; scars; pulsations noted. Supple; non-tender to palpation. FROM; no stridor noted. 2+ Carotid pulses, no thrills; bruits noted bilaterally

Thyroid: Non-tender; palpable left sided mass; no thyromegaly; no bruits noted

Chest: Symmetrical, no deformities, no trauma. Respirations unlabored / no paradoxical respirations or use of accessory muscles noted. Lat to AP diameter 2:1. Non-tender to palpation throughout.

Lungs: Clear to auscultation and percussion bilaterally. Chest expansion and diaphragmatic excursion symmetrical. Tactile fremitus symmetric throughout. No adventitious sounds.

Heart: Cardiac ultrasound was performed, which showed signs of slight pericardial effusion and hypertrophy. JVP is 2.5 cm above the sternal angle with the head of the bed at 30°. PMI in 5th ICS in mid-clavicular line. Carotid pulses are 2+ bilaterally without bruits. Regular rate and rhythm (RRR). S1 and S2 are distinct with no murmurs, S3 or S4. No splitting of S2 or friction rubs appreciated.

Abdomen: Abdomen slightly distended and symmetric with no scars, striae or pulsations noted. Bowel sounds normoactive in all four quadrants with no aortic/renal/iliac or femoral bruits. Non-tender to palpation and tympanic throughout, no guarding or rebound noted. Tympanic throughout, no hepatosplenomegaly to palpation, no CVA tenderness appreciated

Genitalia: External genitalia without erythema or lesions. Vaginal mucosa pink without inflammation, erythema or discharge. Cervix parous (or multiparous), pink, and without lesions or discharge. No cervical motion tenderness. Uterus anterior, midline, smooth, non-tender and not enlarged. No adnexal tenderness or masses noted. Pap smear obtained. No inguinal adenopathy.

Rectal: Rectovaginal wall intact. No external hemorrhoids, skin tags, ulcers, sinus tracts, anal fissures, inflammation or excoriations. Good anal sphincter tone. No masses or tenderness. Trace brown stool present in vault. FOB negative.

No nuchal rigidity noted. Brudzinski's and Kernig's signs negative

CN I Correctly identified coffee and mint odors bilaterally

CNII Visual fields full by confrontation, visual acuity 20/200 OD, 20/100 OS, uncorrected, red reflex present, cream colored discs with sharp borders, no hemorrhages, exudates or crossing phenomena
CNIII, IV, & VI Extraocular movements intact, pupils 3mm OU and reactive to direct and consensual light and accommodation, no ptosis

CN V Face sensation intact bilaterally, corneal reflex intact, jaw muscles strong without atrophy

CN VII Correctly identified sweet, salt and sour tastes (bitter not tested), facial expressions intact, clearly enunciate words

CN VIII Repeats whispered words at 2 feet bilaterally, Weber – no lateralization, Rinne – AC>BC

CN IX and X No hoarseness, uvula midline with elevation of soft palate, gag reflex intact, no difficulty swallowing

CN XI Full range of motion at neck with 5/5 strength and strong shoulder shrug

CN XII Tongue midline without fasciculations, good tongue strength

Motor/Cerebellar: Full active/passive ROM of all extremities without rigidity or spasticity. Symmetric muscle bulk with good tone. No atrophy, tics, tremors or fasciculation. Strength 5/5 throughout. Rhomberg negative, no pronator

drift noted. Gait steady with no ataxia. Tandem walking and hopping show balance intact. Coordination by rapid alternating movement and point to point intact bilaterally, no asterixis

Sensory: Intact to light touch, sharp/dull, and vibratory sense throughout. Proprioception, point localization, extinction, stereognosis, and graphesthesia intact bilaterally

Meningeal signs: No nuchal rigidity noted. Brudzinski's and Kernig's signs negative

Reflexes:

Normal: 2+ throughout, negative Babinski, no clonus appreciated
Abnormal: (document fully as follows):

	R	L		R	L
Brachioradialis	2+	2+	Patellar	2+	2+
Triceps	2+	2+	Achilles	2+	2+
Biceps	2+	2+	Babinskineg	neg	
Abdominal	2+/2+	2+/2+	Clonus	negative	

Peripheral vascular: No pitting edema. Pulses are 2+ bilaterally in upper and lower extremities. No bruits noted. No clubbing or cyanosis.

Musculoskeletal: No soft tissue swelling / erythema / ecchymosis / atrophy / or deformities in bilateral upper and lower extremities. Full active range of motion with no crepitus in all upper and lower extremities bilaterally. Full spinal range of motion with no deformities.

Mental Status Exam
Appearance: The patient’s appearance was normal, clean clothing, appears stated age
Attitude: the patient’s attitude towards the evaluator was calm
Movement: The patient’s movements were calm, no atypical movements
Affect: The patient appeared disoriented and anxious
Mood: The patient’s mood was apathetic
Speech: The patient’s speech was audible and tone was varied
Sensorium: Patient was A & O x 3
Attention and Concentration: The patient’s attending skills and concentration were clouded, dazed, distracted
Thought of contents; The patient’s thought contents were characterized by poverty of thought
Form of thoughts: The patient’s form of thought was characterized by coherent; concrete; derailment; disordered thoughts
Perception: The patient’s perception were characterized as depersonalization
Intellect: The patient’s mental ability was estimated as above average based on prior work history and education
Memory: The patient’s memory was characterized by STM impaired, LTM intact
Insight: The patient’s insight into her illness was being estimated as being limited
Judgement: The patient’s judgement was estimated as being dubious impaired inaccurate lacking

Assessment

26 year old woman with PMH of hyperthyroidism comes to the ER complaining of a sore throat, anterior cervical lymphadenopathy, minimal nonproductive cough and fatigue for the last 3 weeks.

Differential
GABHS
COVID-19
Infectious mononucleosis
Progressive hyperthyroidism

Plan
GABHS- rapid strep test, start patient on Augmentin 875 mg bid

COVID-19- COVID PCR test and symptomatic treatment such as lozenges or Chloraseptic sore throat spray

Infectious mononucleosis- Monospot test to check for EBV antibodies and symptomatic treatment such as fluids, rest, analgesics (NSAIDs)

Progressive hyperthyroidism- strongly recommended the patient see her endocrinologist and have her hyperthyroidism followed. Her symptoms were not severe enough that she would be treated in the ER.