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Situation: Patient is a 55y/o Caucasian female presented to the ER 7/15/13 at 2245. She was admitted for syncope with loss of consciousness while sitting down "passed out". Patent only realized she passed out upon consciousness. Based upon report she passed out for a "few minutes". Co-workers described the patient as seeing her simply falling from the seat to the floor and she had hit her head on the concrete floor containing thin carpet. This fall ended with aloud sound on the left side. Co-workers denies any extraneous movement, no known tongue biting, and no loss of urinary or bowel contents. Prior to ambulance arrival blood glucose was 250 from finger prick. She did inform that she was on the higher end this morning she took her long acting insulin Lantus with an English muffin for breakfast with a dose of carb correcting insulin. The patient is currently using a continuous monitoring system for BG's and after checking the device was running hyperglycemic in the morning prior to the syncopial event. Syncope is a brief lapse in consciousness accompanied by a loss in postural muscle tone (fainting), is a common diagnosis of patients entering the ER. Causes can be cardiovascular or non-cardiovascular. The most cardiovascular include cardio neurogenic syncope or "vasovagal" syncope (carotid sinus sensitivity) and primary cardiac dysthymias (tachycardia and bradycardia). Others cause can r/t prosthestion, pulmonary valve malfunction, pulmonary emboli, aortic dissection, anemia and HF. Non cardio could be hypoglycemia, hysteria, seizure, stroke, and transient ischemic attack (Lewis, 2011).

Background: Prior to syncopial episode, the patient describes her current health as well. Most recently been admitted in early June for unknown reason in an outside hospital. She follows up with her endocrinologist and PCP on a weekly basis with diabetes teaching and medications. She denies H/A d/t hitting head on floor. No change in visual acuity. She denies SOB, no changes in her breath at rest. No changes in hearing, or swallowing abilities. Per co-worker patient has had episodes of slurred speech in the past few months when hyperglycemic. Past medical history Type 1 DM, retinopathy, neuropathy. Multiple DKA's. CAD with history of MI 2 years ago, last known TEE 5/2012 is LVEF greater than 65% with mild AR, trace MR no diastolic dysfunction, malignant history, end stage renal failure, hemodialysis dependent, almost anuria (very little urine pass less than 45 cc per day), history of TIA with residual left sided weakness and parenthesis, hyperlipidemia and osteoporosis.

Allergies= Morphine and Phenergan

Code status= Full

Diagnostic test –The patient is status post left nephrectomy, breast reduction, and back surgery. On day of admittance CT brain shows no bleed, no fracture, stable bilateral chronic thalamic lacunar infarcts. Pending MRI and EEG results from the following day.

Procedure- Scheduled for dialysis 7/16 @ 1600 last blood filtration was Saturday 7/13/2013.

Medications

Class- Medication	MOA	Indication and S/E
Anti-diabetic Lantus 6units am and 8 pm	Insulin glargine binds to the insulin receptor (IR)	Indication: a long-acting (basal) insulin for the control of hyperglycemia s/e: Hypoglycemia
Anti-diabetic Humalog sliding scale corrective at each meal	Insulin binds to (IR) as well.	Indication: To be used in conjunction with intermediate or long-acting insulin. s/e: hypoglycemia
Lactams Metolazone 5mg po bid	acts primarily to inhibit sodium reabsorption at the cortical diluting site	Indication: For the treatment of hypertension s/e: dizziness on standing up, drowsiness, fainting at toxic levels
Sulfanilamide Bumex 2mg po tid	inhibits the sodium-potassium ATPase pump	Indication: treatment of edema associated with renal failure s/e: muscle pain, dizziness
Polypeptides Lisinopril 40mg po daily	ACE inhibitor that antagonizes the effect of the RAAS	Indication: hypertension and symptomatic congestive heart failure s/e: cough, dizziness
Statins Atorvastatin 80mg po qhs	inhibits the hepatic enzyme HMG-CoA reeducates	Indication: reduce the risk of myocardial infarction (MI), stroke, angina s/e: diarrhea, N/V
Benzene and Derivatives Clonidine 0.1mg po tid	α-adrenergic agent that acts specifically on α_2-receptors	Indication: adjunct in the treatment of hypertension s/e: drowsiness, dizziness
Fish oil 1g po qhs	polyunsaturated fatty acids used in the body's cells	Indication: High triglycerides< 150 recommended s/e: risk for bleeding
Amino Acids Gabapentin 300 mg po tid	interacts with cortical neurons at auxiliary subunits of voltage-sensitive calcium channels	Indication: treatment of partial seizures s/e: dizziness, drowsiness
Phenols and Derivatives Pantoprazole 40mg po q daily	a proton pump inhibitor (PPI) that suppresses the final step in gastric acid production	Indication: short-term treatment (up to 16 weeks) in the healing and symptomatic relief of erosive esophagitis s/e: tired feeling
Aliphatic and Aryl Amines Sevelamer 2400 mg divided po tid	Prevents hypophosphatemia by binding to dietary phosphate in the gut, preventing its absorption and thus decreasing serum parathyroid hormone levels.	Indication: control of serum phosphorus s/e: stomach pain

Carbohydrates Topiramate 25mg po bid	not known , but is associated with blocking GABA	Indication: partial seizures and severe tonic-clonic (grand mal) seizures and also for the prevention of migraine headaches s/e: mild dizziness, feeling nervous
Phenols and Derivatives Metoprolol 100mg po bid	competes with adrenergic neurotransmitters such as catecholamine for binding at beta(1)-adrenergic receptors in the hear	Indication: acute myocardial infarction, angina pectoris, heart failure and mild to moderate hypertension s/e: confusion

Labs- CBC was within the following normal parameters WBC (5,000-10,000), HGB (12-16), HCT (38-47%) RBC (4.2-5.4), PLTS (150,000-450,000).

Chemistry was also in normal range - Na (135-145), K (3.5-5.0), Cl(98-108), CO (22-30) , BUN(6.2-21), Cr(0.5-1.0), Mg (1.5-2.5), and potassium (3.5-5.0)

Glucose 239 out of range 70-140 due to metabolic complication lacking production of insulin, Troponin < 0.04 (0-0.1) no proteins to indicate damage of heart, Hemoglobin 10.4 (6.5) overview of glucose in bloodstream indicator of DM ,an additional diagnostic tool as well.

Assessment:

Vital Signs- RR range 8-22 @ 1500, BP 115/67, Spo2 95%, Temp 36.5/97.7 Pain 2/10 lateral side back of neck. Weight 63.5 kg Height 5'5" BMI= 23.5

Focused shift assessment

- Neuro- A&O x2, PERRLA, Glasgow coma scale 11/15 at risk for falls, BLE BUE strength +3. Denies H/A.
- Cardiovascular- non distended jugular vein. Cannula 3L/min. Capillary re-fill < 3 seconds, bilateral radial pulse +2, and palpable pedal pulse bilateral +2. Pending orthostatic BP results?
- Respiratory-lower lobes bilateral auscultation fine crackles, non-labored breathing, RR ranging from 8-22.
- GI-abd non- distended, active bowel sounds x4 quadrants, non-tenderness upon palpation, denied N/V, BM soft color consistent on 7/15/13 0200. Pt is on a low potassium diet due to end stage renal failure.
- GU-Voids without assistant in commode input 500 cc output at 100cc 0900 since time of admission. End stage renal failure, ultrasounds of bladder scan indicates 300cc of urine. Stray catheter inserted to withdraw approx. 275cc for UA to determine signs of sepsis and measure filtrated medications to prevent hazards concern.
- Skin-is intact central line port in R jugular vein, warm to touch, no perspiration, dry extremities, mouth appears hydrated no cracks or signs of cyanosis, and no signs of swelling or inflammation at IV site hep lock L arm 22 gauge. Av fistula in right arm.

- Extremities- are movable strength BLE and BUE +3.

Recommendations

- 1. Follow up with neurologist to measure ICP periodically d/t falling on head just for precaution measures
- 2. Reconcile medication that could have contributed to this syncope/epileptic event.
- 3. Maintain a sodium restricted diet to prevent hypertension and water retention, low potassium diet to prevent heart complications, low phosphorus for bone protection and protein to prevent excess waste in blood. Lastly, carb control diet to help manage erratic glucose readings.
- 4. Communicate with social worker for in house care with ADL/IADL's's up to the first month, if needed.
- 5. Ambulate throughout the day to help with circulation and promote bowel movements and prevent pressure ulcers.
- 7. Follow up with diabetes educator to improve the increase glucose levels in 200s level, with reconciliation of insulin and promote tighter control.

Reflection-After reflecting back on week 4, I was introduced to a case that was a mystery and it was a matter of placing all pieces of the puzzle together. The above case could have been a number of things from possible epileptic events, glucose levels, medication and renal failure due to hct and hgb levels affected. But based on lab work, results were in range. In addition, I was able to perform a straight catheter for this case because pt could not void freely. Since this is my final ejournal I can say that I have noticed an increase in developing my interpersonal skills with my patients. However, I am looking forward to week 5 in the ER to continue with challenging my skills and critical thinking process.