



1/26/23 Morning Report with @CPSolvers



Case Presenter: Emilia (@EmKaslowZieve) Case Discussants: Rabih (@rabihmgeha) and Amanda Barreto (@amandabarretof2)

CC: AMS
HPI: 77 yo F w/ AMS, poor responsiveness and concentration. No LOC, no prodromes. Able to maintain conversation. Denied nausea, bowel movements, changes of urination, headache, chills, SOB. Her husband brought her to ED.

PMH:
HTN, HSV, Hyperparathyroidism, Surgical history: hysterectomy and oophorectomy (at 25yo)
R hip surgery, R knee surgery (years unknown)
Meds:
Amlodipine, Hydralazine, Hydrochlorothiazide /Spironolactone, Losartan, Clonidine, Celecoxib, Nebivolol,, Valacyclovir

Fam Hx:
Alcohol addiction
Soc Hx:
Lives with her husband, volunteers
Health-Related Behaviors:
Occasionally drinks
Prior use of drugs in her teens (cocaine)
Allergies:
Penicilline

Vitals: T: 36.7 °C HR:72 BP: 157/124 RR:17 SpO₂:
Exam:
Gen: no acute distress
HEENT: intact extraocular movements, dry oral mucosa, no adenomegaly nor lymphadenopathy
CV: regular
Pulm: regular, breathing normally
Abd: soft, not tender nor distended, no masses
Neuro: poorly oriented, no focal deficits, intact cranial nerves, inability to spell "world" backwards, some memory deficits, clear, yet slow, speech
Extremities/Skin: no deformities, dry skin

Notable Labs & Imaging:
Hematology: WBC: 5.700 Hgb: 13.4 Hct: 40 MCH: normal Plt: 142.000
Chemistry: Na:138 K: 3.5 Cl: 96 CO₂:31.2 Anion gap: 11 BUN: 15 Cr: 1.59 (baseline 0.9) Glucose: 96 Ca: 9.6 Total protein: 8.1 AST:31 ALT:9 Alk-P:42 Bili: 3.1 (Ind:2.3 Dir: 0.8) Albumin: 4.7 Urine: Nitrates: - Protein: +2 Ph:6 Cr: 491 Prot:141 LDH: 346 Ammonia: 17, Troponin:9 Haptoglobin:48 Utox: - Ethanol level:48
INR 1,1 PT 14.7
VBG: pH 7.44, pCO₂ 44, pO₂: 41, Sat: 73%, HCO₃: 30
Peripheral smear: negative schistocytes, coherent with thrombocytopenia
Imaging:
EKG: sinus rhythm, w/ PVCs and non-specific flattenings nor lowerings, low voltage (coherent with prior exams)
CXR:negative
TC:negative
Normal renin and normal aldosterone, TSH: 260 T3 <0.2 and T4 <0.1
Dx: Myxedema coma

Problem Representation: 77 yo F w/ AMS
Final diagnosis was made with myxedema crisis due to respiratory acidosis from hypoventilation (hypothyroidism-induced)

Teaching Points (Maddy):
Clinical reasoning 2 phases: 1) understand nature of problem, 2) solve the problem.
AMS: MIST approach (metabolic, infection, structural, toxin)
Additional info: need to know baseline, e/o focal neuro deficit, e/o systemic involvement.
Real life 3 priorities. 1) neuro exam (focal neuro deficit), 2) respiratory rate (consider Narcan if low), 3) fingerstick glucose
HTN + sx: Need to translate sx into specific diagnosis which may or may not be related to HTN. If consequence unrelated (i.e hyponatremia) > maybe patient haafmissed meds because of other sx.
AKI: usually high K+ and low CO₂ (bicarb). But not in this case.
When CO₂ is high: most common cause is CO₂ rising as compensatory mechanism for lung disease. No lung disease here, therefore, primary issue is more likely.
Why CO₂ rise? Ingestion (milk-alkali, baking soda). Making bicarb (aldosterone makes it)
High Aldosterone: suspect when BP increases, low K+, high bicarb
AMS + excess aldosterone + hyperbili
VBG: venous 7.44, arterial 7.5 -> alkalosis
Metabolic alkalosis (high pH, pCO₂ high): 1st step > look at urine chloride. Chloride sensitive or resistant.
HTN correlates with high urine Chloride. Question: why does she have high aldosterone?
Myxedema crisis/hypothyroid: can get respiratory acidosis from hypoventilation. **Clue:** history s/p ablation