



4/6/20 Morning Report with @CPSolvers



Case Presenter: Vlad Fomin (@Doc_Fomin) **Discussants:** Brandon Kinneman (@BrandonKinneman), Haylie Kromer (@HaylieKromer)

CC: weakness + urinary incontinence
HPI: 74 M p/w 1 week of weakness, urinary incontinence. Wears diaper at baseline, global weakness, tired. Going to bathroom more frequently. No dysuria, fevers, chills, diarrhea. Day of admission: unsteady, fell. No prodromal sx prior to fall, no CP, dyspnea, or nausea

Day 2: consuming 10 Tums daily

PMH: metastatic melanoma s/p excision, baseline cognitive impairment, bradycardia s/p pacemaker, OSA on CPAP, GERD, BPH
Meds: aspirin, oxybutynin, sertraline, tamsulosin, alopurinol, donepezil, memantine, tums PRN

Fam Hx: n/a
Soc Hx: lives at home with wife. Retired, 30 pack year smoker, no alcohol, drug use, no recent travel

Vitals: afebrile, HR 64, RR 18, BP 103/71
Exam:
Gen: obese man, no distress
CV: no RRR **Pulm:** CTAB
Abd: diffusely TTP, not focal, no rebound/guarding, scar left upper back (melanoma resection), no rashes
Neuro: CN intact, 5/5 strength bilaterally, decreased effort. AAOx2 (x3 usually). Normal reflexes

Notable Labs & Imaging: CBC normal
CMP: Na 132, K 4.8, Cl 87, *Bicarb 30*, BUN 15, Cr 1.09 (bl 0.8), glucose 124, Ca 17.1, AST 16, ALT 36, AP 71, Direct bili 0.2 total bili 2, albumin 4.5,
UA: clear, no ketones, no LE, pH 8, neg protein Specific gravity 1.042, no WBC, no RBC.
ESR 14, CRP 3.
CT head/Abd: normal
PTH: 16 (low normal), 25-Vit < 5, 1,25 wnl
PTHrp less than assay (0.4)

Day 2: Ca: s/p IVF zoledronic acid, calcitonin, dropped below normal, iCal: 0.97

Problem Representation: 74M w/ metastatic melanoma and cognitive impairment presents with acute global weakness, gait instability, and urinary incontinence, found to have hypercalcemia and a metabolic alkalosis c/w the Milk Alkali Syndrome

- Teaching Points:**
- When facing weakness, our task is to determine if we are dealing with **true weakness or asthenia (sensation of weakness)**.
 - Clues suggesting **asthenia** include **symmetry, whole body involvement, presence at rest, & absence of sensory, autonomic, cognitive changes**.
 - **Polyuria can mimic urinary incontinence**. The **amount of urine voided** can help influence your suspicion for each. Polyuria → High Volume.
 - An approach to **hypercalcemia** centers on determining a **PTH or non-PTH** mediated process, such as lytic bone dz, elevated Vit D (e.g., granulomas), or milk-alkali syndrome.
 - **Normal PTH** in the setting of hypercalcemia is **abnormal**. This can drive abnormally normal 1,25 Vit. D because **PTH activates alpha-hydroxylase and conversion of 25 → 1,25 Vit D**.
 - A **Cl:P ratio > 35** is suggestive of a **PTH mediated process** because maintaining electrical neutrality
 - Tx of **hypercalcemia** includes **fluids +/- diuretic, Bisphos or RankL inh**, and, when possible, treatment of the underlying cause.