



12/10/20 Morning Report with @CPSolvers



Case Presenter: Rafa Medina (@Rafameed) Case Discussants: Rachel Tenney (@rachel_tenney) and Hassan Raza (@hraza222)

<p>CC: Brown urine</p> <p>HPI: 25M</p> <ul style="list-style-type: none"> - <u>3 days</u>: Reduced urine output brown colored associated with worsening generalized weakness. - <u>6m ago</u>: His primary doctor warned him his lipid profile test and other labs were altered, didn't seek any medical attention. - No chills, fever, nausea, vomiting. 	<p>Vitals: T: 37.5 HR: 102 BP: 140/90 RR: 18 SpO₂: 98% ra</p> <p>Exam:</p> <p>Gen: Fatigue</p> <p>HEENT: Normal</p> <p>CV: RR with S4</p> <p>Pulm, Abd, Neuro: Normal</p> <p>Extremities/Skin: Muscle tenderness (trunk and lower extremities), no edemas, rash. Mammary glands increased and non tender. Severe acne on his face, chest back</p>	<p>Problem Representation: 25M p/w acute brown urine and many labs altered. On examination he was found to have gynaecomastia, hypertension and severe acne. Labs were consisted with rhabdomyolysis.</p> <p>Final Dx Rhabdomyolysis due to steroid abuse</p>
<p>PMH: None</p> <p>Meds: Recently switched to a new drug</p>	<p>Notable Labs & Imaging:</p> <p>Hematology:</p> <p>WBC: Normal Hgb: 17.5 HC 56% Plt: 540K</p> <p>Chemistry:</p> <p>Na: 132 K: 6 Cl: 97 Cr: 9.3 Ca: 8.5 Phos: BUN 40 AST: 1750 ALT: 365 Alk-P: 105 T. Bili: 10 Albumin: 4 GGT 110 HDL 27 LDL 160</p> <p>CK level: Above upper limits!</p> <p>UA: pH 6, specific gravity: 1015, hematuria, myoglobin + proteinuria, hyaline cast</p> <p>Imaging:</p> <p>EKG:</p> <p>CXR: Cardiomegaly</p> <p>US- renal: No abnormalities</p> <p>Patient admitted steroid abuse for 5 years. Received supportive with IV fluids and hemodialysis → recovered renal function</p> <p>Final Dx: AKI due to rhabdomyolysis due to steroid abuse</p>	<p>Teaching Points (Sukriti):</p> <p>Investigating the Sx: Brown urine</p> <p>Endogenous: Concentrated urine, pigments: heme pathway (porphyrins, hemoglobin, myoglobin, direct bilirubin)</p> <p>Exogenous: Food and medications</p> <p>Problem Representation: Sx + time + context</p> <ul style="list-style-type: none"> - Layering the Sx of generalised weakness, reframes this case from a "kidney problem" to a systemic process. - Deciding what is signal vs noise: Abnormal lipid profile in a young adult is concerning <p>Collecting clues: Muscle tenderness + brown urine + generalised weakness = rhabdomyolysis, hemolysis, infectious process</p> <p>Gynaecomastia - hormonal imbalance - prolactin mediated, elevated estrogen</p> <p>AST: ALT: Sources of elevated AST: muscle, heart> RBC (normal Hb, height of bilirubin)</p> <p>BUN:Cr: Intrarenal AKI: pigment (Hb, myoglobin), crystals (tumor lysis, ethylene glycol)> Paraprotein (MM)</p> <p>CRP: Hyperkalemia in the context of raised creatinine, is almost always due to the kidney injury</p> <p>Framing the hypothesis: What is causing the Rhabdomyolysis?</p> <p>Medications (exogenous steroids), infections, metabolic/endocrine causes, physical factors</p> <p>Anabolic steroids - builds up muscle (heart, extremities), builds up RBC mass (polycythemia), acne on chest and back</p>
	<p>Fam Hx:</p> <p>Soc Hx: Born and raised Brasil. No travel</p> <p>Health-Related Behaviors: No smoking, alcohol</p> <p>Allergies: None</p>	