



2/26/22 Morning Report with @CPSolvers



Case Presenter: Dhruv Srinivasachar (@TheRealDSrini) Case Discussants: CPSolvers fam <3

<p>CC: 21yF w/ easy bruising</p> <p>HPI:</p> <ul style="list-style-type: none"> - Presents in ED w/ 4 days of fever, fatigue, dry non-productive cough, sore throat and cervical LAD - In last weeks: Fatigue, easy bruising, petechiae - Bleeding gums since 2 weeks, epistaxis 4d before - Menorrhagia (changes tampon every 4h), longer cycles (7 days instead of 4 or 5 days); No SOB, dizziness, no sick contacts, vomiting or hematemesis - chills, diaphoresis, dizziness, headaches, diarrhea, nausea 	<p>Vitals: T:99F (104F initially in ED) HR:136 BP:133/77 RR:16</p> <p>SpO₂: 94% in RA</p> <p>Exam:</p> <p>Gen: no acute distress</p> <p>HEENT: 3+ tonsils petechiae over the circles, whitish exsudates, palor</p> <p>CV: normal Pulm: normal Abd: normal, no organomegaly</p> <p>Neuro: normal, no focal deficits</p> <p>Extremities/Skin: warm w/ <3s capillary refill, petechiae esp. On lower extremities (present over all her body!)</p>	<p>Problem Representation:</p> <p>ENG: 21yF patient w/ no significant PMHx p/w subacute mucocutaneous bleeding, acute constitutional symptoms and LAD.</p> <p>ESP: Paciente femenina de 21 años sin antecedentes de relevancia presenta eventos hemorrágicos mucocutáneos y posteriormente un episodio febril con síntomas constitucionales y linfadenopatía.</p> <p>HIN: युवा महिला रोगी को आसानी से चोट लगने, गले में खराश, थकान और बुखार के साथ पेश किया गया।</p> <p>Ger: 21 Jährige Pat. ohne relevante Vorgeschichte vorstellig mit erhöhter Blutungsneigung, Fieber und zervikaler Lymphadenopathie.</p>	
<p>Past Medical History: none</p> <p>Meds: Oral contraceptives</p> <p>2x Covid vaccinated</p>	<p>Family History: No bleeding disorders or liquid malignancies</p> <p>Social History: Lives in Midwest w/ fiance, college student</p> <p>Health Related Behaviours: No tobacco, occasionally Cannabis</p> <p>Allergies: none</p>	<p>Notable Labs & Imaging:</p> <p>Hematology: WBC: 150 Hgb:9.6 Plt:24</p> <p>Initial labs: WBC: 164, Hgb: 8.1 MCV: 104.6, Plt: 8 (95 after 3x PT), Blasts 97%, ANC 0</p> <p>Blast 159.1 absolute (Auer rods present), CMP normal</p> <p>Coags normal</p> <p>Peripheral smear: blasts</p> <p>PCR: PML-RARA negative, FLT3-ITD +</p> <p>Chemistry:</p> <p>Na: K: 2.9 Cl: CO2: BUN: Cr: glucose: Ca: Phos: Mag:</p> <p>AST: ALT: Alk-P: T. Bili: Albumin:</p> <p>Imaging:</p> <p>EKG:</p> <p>CT-head: normal</p> <p>Process: Treated w/ Hydroxyurea, Rasburicase, AML protocol</p> <p>Dx: FLT3-ITD + AML</p>	<p>Teaching Points (Samy):</p> <ul style="list-style-type: none"> • Easy bruising: thrombopenia /-pathy, von willebrand disease (hereditary, aquired), coagulopathy (hereditary, aquired), problem with vascular integrity (e.g. scurvy, senile purpura, ehlers-danlos, amyloidosis...) • Lab neg. bleeding: platelet disorders (Glanzman, Bernhard-Soulier, platelet storage pool diseases), von willebrand disease, hemorrhagic fevers, meds, uremia, vessel disintegrity (hereditary or acquired) • Approaching bleeding diathesis: Trauma? Timing? Location? Comorbidities? • Disorders of prim. hemostasis (mucocutaneous bleeding, petechiae), vs sec. hemostasis (hemarthros, soft-tissue bleeding) • Cervical LAD? -> Also think about disseminated LAD (e.g. in axillas, intestinal, hilar, etc.) -> shifts focus from HEENT pathologies to systemic ones • DDx Leukocytosis: primary (monoclonal, leukemia) vs. reactive (polyclonal, leukemoid reaction in infections, systemic inflammatory syndromes) • Workup: check differential, blood smear, markers of high cell-turnover (uric acid, LDH, hypocalcemia, hyperphosphatemia,...), bone marrow biopsy • Young age and leukemia: prioritizes ALL>AML, CML and CLL in older patients • Complications of leukemia: infections, cardiovascular decompensation, bleeding, tumor lysis syndrome with AKI, hyperviscosity syndromes,... • Auer rods: Acute promyelocytic leukemia (APML) -> Hyperfibrinolytic DIC (Acute hematologic emergency -> ATRA, differentiates the blasts) • PML-RARA: peripheral PCR for quick detection of APML