



05/21/24 Morning Report with @CPSolvers



"One life, so many dreams" Case Presenter: Laura Pax Case Discussants: Youssef Saklawi (@SaklawiMD) and Ann Marie Kumfer (@AnnKumfer)

CC: Poor wound healing
HPI: 42 year old male
 Prolonged hospitalization for burns, poor wound healing and fever
 Had **severe burns (44% BSA)**, required intubations, skin grafting and blood transfusions
Month after discharge, had **worsening of back wounds**
 Recently had **fever, scratchy throat and dry cough for 3 days**
 ROS: no abdominal pain, no urinary symptoms, night sweats, joint pain, no sick contacts
 Day 2: Had poor urine output and worsening mental status

PMH:
 Prolonged hospitalization

Meds:
 Topical med for back

Fam Hx:
 Non contributory

Soc Hx:
 Not working since burn injury in Fall, previously 1 female partner,
 Never left Georgia, doesn't spend time in woods

Health-Related Behaviors:
 drinking 3 gins per week, marijuana

Allergies:
 No known allergies

Vitals: T: 36.7 HR:**130** BP:116/69 RR:15 99% on RA BMI: 20.8
Exam:
Gen: chronically ill, no acute distress, AxO x4
HEENT: no scleral icterus, no conjunctival pallor
CV: **tachycardic**, RRR, no murmur, no elevated JVP.
Pulm: no increased work of breathing no wheezing
Abd: soft, non tender, no organomegaly
Neuro: AOX4, no focal neurological deficits
Extremities/skin: well healing burns on torso, head, neck, arms, well healing skin grafts on his thighs, **back: completely open wounds;** warm, well perfused, no edema

Notable Labs & Imaging:
Hematology:
 WBC: 9.0 (Diff: **inclusions resembling malaria**) Hgb: 9.7 (Day 2 Hb 7.8) Plt: 95
Chemistry:
 Na: 134 K: 4.4 Cl:96 HCO3: 25 BUN: 22 Cr:1.1 (day 2 3.3) (bl 0.5) glucose: 147
 Total Bilirubin: 2.0
 CRP>240 haptoglobin<30 LDH 845 INR 1.7

Imaging:
 EKG: **sinus tachycardia**
 CXR: **bibasilar atelectasis**

Peripheral smear: Possible babesia species present, 9.9% done by alternate method

Dx: Severe Babesiosis

Problem Representation:
 42 year old male with back wounds, fever, scratchy throat found to have severe babesiosis.

Teaching Points (Seyma):
Poor wound healing: blood flow (in-and out), inflammation (e.g. infection, autoimmune/autoinflammatory), nutritional status (protein, vitamin C, zinc), repeated trauma, vascular fragility, environmental factors/access to hygiene, neoplastic, graft rejection
 → focal: localized infection (anaerobes, fungal)/trauma, cat scratch
 → disseminated: systemic disease
 Skin biopsy from edge of wound to exclude graft rejection!
Tachycardia: Sympathomimetic toxicity (endocrine, substance exposure/withdrawal), Infection
Burn is a risk factor for infections w/Candida!
Anemia + Thrombocytopenia: Rule out Heparin, Sepsis, MAHA (HUS, TTP, DIC, ...), chronic hemolysis w/ hypersplenism, bone marrow insufficiency
 → Rule out Heparin & Schistocytes (PBS)
Low Haptoglobin: Cirrhosis, Hemolysis
Infections p/w hemolysis (MaPa3xBabies & others): Malaria, Cl. perfringens, Babesia, Brucella, Bartonella & others (Capnocytophaga, Leptospirosis)
Kidney + Hemolysis: Ischemia, ATN, MAHA (HUS, DIC), Malaria
Pulmorenal syndromes 2/2 infections: Malaria, Hanta, Lepto

Babesiosis:
 → risk factors: travel to endemic areas (Midwestern & Northeastern states), HIV, malignancy, asplenia, HF, **transfusions**, organ transplant
 → Ixodes is also the vector for Anaplasma & Borrelia (Patients w/ Babesia can also have Lyme's dz)
 → PBS: intraerythrocytic rings, Maltese cross