07/17/21 Morning Report with @CPSolvers

Case Presenter: *Rafael Alvim* ***Case Discussants***: *CPS Family <3 Rabih Geha (@rabihmgeha) and Maria Jimena (@MariaMjaleman)*

CC: leg swelling and dyspnea.

HPI: 66 year-old male presents to the emergency department with worsening bilateral leg swelling and dyspnea for the last 5 days. He also run out ot bumetanide one week prior to admission.
He denies chest pain, upper respiratory infections or symptoms, fever, chills, sweats, and localizatory infectious symptoms.
He was admitted to the hospital, the edema improved after IV diuretics, and 48 hours after admission the patient developed fevers.

Past Medical History:
Systolic heart failure due to ischemic heart disease and
HIV
Previous/last labs:
CD4 243 and undetected viral load

Meds:
Bumetanide
Hydralazine
Isosorbide dinitrate
Dolutegravir
Emtricitabine
Tenofovir

Family History:
Not relevant.

Social History:
Not relevant.

Health Related Behaviours:
Not relevant.

Allergies:
Not relevant.

Vitals: **T**: 101 **F HR**: 104 **BP**: 137x84
RR: **SpO_2**: 96%
Exam::
CV: 2/6 systolic murmur at the left sternal border
Pulm: clear to auscultation
Extremities/Skin: trace edema in bilateral lower extremities. Right knee effusion mildly warm on palpation.

Notable Labs & Imaging:
Hematology/Chemistry:
CBC and CMP normal

Arthrocentesis: WBC 38,000 / RBC 9,000 / Gram stain and culture: negative.
Crystal analysis: calcium pyrophosphate crystal.

Final diagnosis: Crystal pyrophosphate deposition disease (Pseudogout).

Problem Representation:
ENG: 66 year-old in Brazil M p/w worsening bilateral leg swelling and dyspnea over 5 days. PMH is significant for HIV and HF
ESP: Varón de 66 años con antecedente de VIH e ICC acude a urgencias con edema bilateral de miembros inferiores y disnea en los últimos 5 días, con antecedente de haber dejado de tomar bumetanida una semana antes
POR: homem de 66 anos, com antecedente de HIV e ICC por isquemia miocárdica, vem ao pronto-socorro com quadro de edema bilateral de membros inferiores e dispneia nos últimos 5 dias, com história de ter parado uso de bumetanide uma semana antes da apresentação ao PS.

Teaching Points (Andrea):
- BL lower leg edema and dyspnea. Look for distended veins:
- Pay attention if pt can tell story clearly most probably is a heart dz. If patient has kidney and liver: Subtle metabolic encephalopathy
- Bendopnea: Getting out of breath when tying your shoes. Sign of Heart Failure
- Bumetanide (Bumex, and Burinex): diuretic commonly prescribed for HF or severe kidney dz. Used in severe refractory hipervolemia
- HIV can cause CAD, cardiomyopathy, HIV-associated nephropathy (HIVAN), collapsing focal segmental glomerulosclerosis also known as collapsing glomerulopathy
- Tenofovir can cause proximal tubular disorder Fanconi syndrome
- Myxedema of Graves disease is a NON pitting edema.
- Lyme disease most commonly occurs in the Northeast and mid-Atlantic regions and in the upper Midwest
- Unilateral knee effusion: crystalline (gout or pseudogout), OA, infections (staph, strep)
- Crystalline arthritis only causes fever when polyarticular
- Heart dz: Endocardio (endocarditis), miocardio (AMI), pericardio (Pericardial effusion)
- Lyme dz tends to affect heart conduction like symptomatic bradycardia
- Brucella can cause inflammatory pattern Usually the symptoms are nonspecific, such as joint pain, fatigue, sweating, fever and gastrointestinal problems
- WBC is above 2000 you can not differentiate septic from crystal knee effusion
- Neisseria gonorrhoeae causes effusion with lower WBC
- Pseudogout - gout flare can start after initiation of diuretic