



# 12/24/20 Morning Report with @CPSolvers



Case Presenter: Michal Klepadlo (@MichalKlepadlo) Case Discussants: Chioma Ndukwe (@Chioma\_Ndukweau) and Thiago Mendes (@MendesThiagoB)

**CC:** Fever

**HPI:** (November) 50y M p/w fevers and chills. Over last 6w he first noticed sinus congestion + cough which slightly resolved. Then shortness of breath, intermittent fevers and last 2w chills.

On presentation ill appearing, difficult to get more information.

**PMH:**  
 Untreated Hep C. DM2, Mild intermittent asthma. GERD. R lateral incisor broke off a month ago  
 Disseminated gonorrhea and chlamydia - treated. No known HIV.

Non contributory surgery history.

**Meds:** None

**Fam Hx:** None

**Soc Hx:** Colorado, Midwest, USA. Recent travel from New Mexico. Experiencing homelessness.

**Health-Related Behaviors:** Doesn't drink alcohol. Smokes tobacco once in a while. Smokes meth and spice. 2007 last known IV drug use. Incarcerated 2007 - 2015. No relationships 2.5 years ago. Last sexual relationship w/female 1.5y ago. Oral sex w/man 4 month ago.

**Allergies:** None.

**Vitals:** T:99.3 HR: BP:131/34 RR:26 SpO<sub>2</sub>:92

**Exam:**  
**Gen:** sick appearing, can't focus when speaking.  
**HEENT:** -  
**CV:** Diastolic murmur 3/6 left lower sternal border. Pulse irregularly regular - bounding and bigeminal pattern.  
**Pulm:** tachypnic. CTAB.  
**Abd:** NI **Neuro:** NI **Extremities/Skin:** NI

**Notable Labs & Imaging:**  
**Hematology:** WBC: 16.5 (L shift) Hgb:9.5 MCV 74 Plt:283  
**Chemistry:** Na:132 K:4.3 Cl:101 CO<sub>2</sub>:23 BUN:15 Cr:1.1 Ca:8.6 Phos: 3.9 Mag: 2.1 AST: 33 ALT:34 Alk-P:44 Albumin:2.1 TP: 6.7

ProBNP: 1,424 D-Dimer and troponins neg.  
 UA negative. Urine drug panel: meth and THC positive.

Blood cultures \*pending\* → 6 days later: N. Gonorrhoea.  
 HIV: neg. HBVs: positive, HBV core: neg  
 NAATs Gonorrhoea and Chlamydia: Neg. Swabs Gonorrhoea neg.  
 Treponemal tests neg.  
 Terminal complement deficiency: \*pending\*

**Imaging:**  
 EKG: 2nd degree heart block type 1.  
 CXR: Patchy areas bilaterally. Cardiac silhouette mildly enlarged.  
TTE: EF 63% Large aortic valve vegetation concerning for perivalvular abscess. Transesophageal echo: confirmed vegetation.

CV surgery: trileaf aortic valve replaced due to visible vegetation. No annular abscess. Debridement of necrotic tissue.

**Final DDX:** N. Gonorrhoea Endocarditis

**Problem Representation:** 50yM w/multiple risk factors for STDs p/w inflammatory signs and a new heart murmur.

**Teaching Points (Rafa):**

- **APPROACHING 50 Y.O M P/W FEVER AND CHILLS + SINUS CONGESTION / COUGH + SOB + INTERMITTENT FEVERS + FEVERS**  
 Common presentation - Fever is not a specific symptom: IMADE: infection, malignancy, autoimmune, drugs, endocrinopathy / Be sure it's not an environmental problem (covered in blankets)  
 Who - immune status? Where - community factors? How long - time course? Sinus congestion + cough - sinusitis
- **PE: DIASTOLIC MURMUR LLSB, IRREGULARLY REGULAR PULSE W/ BOUNDING AND BIGEMINAL PATTERN**  
 Increased PP (difference between systolic and diastolic pressure) - aortic regurgitation, high CO HF (hyperthyroidism, vit B1 deficiency - wet beriberi)  
 Arrhythmia - irregularly regular pulse
- **LEUKOCYTOSIS + ANEMIA + HYPONATREMIA + UA W/ METH AND THZ + HYPOALBUMINEMIA**  
 Endocarditis - fever w/ onset of a new murmur - why? - consequence of the dental procedure? Chronic disease in the background? - hypoalbuminemia, anemia
- **EKG W/ 2ND DEGREE HB TYPE 1 + CXR W/ PATCHY AREAS BILATERALLY**  
 Suspicion of endocarditis + HB - Sign for abscess?
- **CHEST INFLAMMATION** - source: lungs (more common be in the pleura or parenchyma), heart, mediastinitis, joints
- **ENDOCARDITIS** - most are infectious - Staph, Strep and Enterococcus - source: skin, mouth - collect blood culture before the antibiotics! Or non-bacterial thrombotic endocarditis (vasculitis, hypercoagulable state)
- **GONORRHEAL ENDOCARDITIS** - aortic valve is the most affected. With marked valve destruction - seen in eculizumab use, HIV, SLE