7/20/26 Mainstream Monday with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Ravi (@)* ***Case Discussants****: Youssef (@) & Anmolpreet (@)*

https://clinicalproblemsolving.com/present-a-case/

Scribing (Sneha & Lera)
CC: 40M with vomiting for 1 day
HPI: Seen in the outside hospital before for the flu like symptoms, hyperglycemia and "pimple" on the back. Redness and swelling after manipulation of pimple

ROS: otherwise negative

PMH:
T2DM
HTN

Meds:
Amoxicillin / clavulanate [from OSH]
Insulin
Losartan

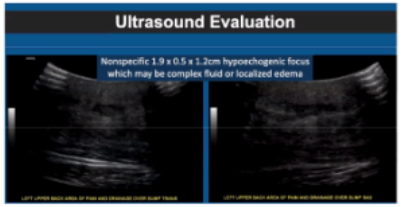
Health-Related Behaviors: none

Vitals: T: normal **HR**: 137 **BP**: 146/97 **RR**: 23 **Sat**: 100%
Exam: Gen: uncomfortable
HEENT: dry mucosa, poor dentition
CV: nl **Pulm**: tachypneic, lungs clear **Abd**: N
Extremities/skin:
2.5 X 2.5 inch induration in the upper back, tender to palpation

Notable Labs & Imaging:
Hematology: WBC: 16.97 K (N predominant) -> 9 -> 14
Otherwise CBC nl
-> 24 h later developed fever to 39.2 C
Chemistry:
Na: 128 K:5.6 HCO3: <10 Cr: BUN: Glucose: 404 Ca: 10.8
AG: *very* high ABG: pH 7.14 **BHB**: high Alk-P: 135 **UA**: nl

CRP: 249 A1c: 9.7%

Blood C/S - MRSA +
TTE: negative
CXR nl



Ultrasound - hypoechoic lesion
MRI w/o con - intense soft tissue signal overlying the thoracic spine suggestive of cellulitis / no abscess seen

Repeat MRI - irregular enhancing fluid filled lesion 6x8x1 cm

Dx: Pyomyositis with MRSA bacteremia and DKA

Problem Representation:

Teaching Points (Gillian)
Acute nausea & vomiting in a diabetic patient should make you consider ketones & blood glucose. Ketosis more likely in context of infection.
Management: IV fluids, insulin with checking blood sugar, underlying cause
- In addition to insulin drip, start long acting insulin (https://pubmed.ncbi.nlm.nih.gov/36479786/)

Gram positive infections: where did it come from, where did it go? Thorough physical exam including joints, hardware/catheters, cardiac exam, ID consult, blood cultures
Nausea in itself does not localize:
- GI (stomach most often): obstruction, gastroenteritis
- Blood: dka, uremia, adrenal, toxins/meds, cytokines
- Brain

Acute vomiting think of blood or stomach rather than CNS

Purulent think of staph aureus (MRSA), nonpurulent think of strep. Amox/clav does not cover MRSA.
Choose antibiotics:
- What covers gram negative, gram positive, anaerobes, MRSA, pseudomonas
- Host: immunocompromised?
- Where is the infection: skin: gram positives, gu&gi: gram negative, obstructed: anaerobes
- Penetrance: does it reach the blood? IV vs oral. IV is not always better, penetrance depends on abx

Source control as early as possible:
- Abscess requires drainage, w/o cellulitis don't need abx, but usually give. Abx can trigger abscess formation

Pyomyositis can be complication of self I&D esp in diabetic patients