5/5/25 Morning Report with @CPSolvers

"One life, so many dreams" Case Presenter: Allison Weiss (@) Case Discussants: John Huang (@)

Scribing (Marcela)
CC: "Chest pain after a fall a week ago"
HPI:73 yo F presenting w/ progressive chest pain after a fall last week. Pt had a skin biopsy of left breast last week. No complications and discharged home. Chest pain is intermittent and non radiating. Denies fevers or chills

ROS: + for urinary frequency

Vitals: T: 103 BP: 130/62 **HR**: 103-110 **RR:** 21 **Sat:** 96% on RA
Exam: Gen: no acute distress
CV: RRR, no murmurs, no LE edema
Pulm: normal
Abd: soft, non tender,
Neuro: AOx3
MSK/skin: Erythema of left breast, spreading to the side of her neck (pain with swallowing and moving her neck), no area of fluctuance, warm around biopsy site, no lymph nodes, some drainage around biopsy site. Shoulder exam: limited ROM due to pain?, tender to deep palpation, warm around anterior region of shoulder, no effusion. Rash in the groin area with white plaques

Problem Representation: 73 yo F w recent breast biopsy presenting with chest pain and urinary frequency. Exam showing fever and local biopsy site erythema spreading to neck and shoulder pain with limited ROM.

PMH:
Breast cancer s/p chemo and radiation (last chemo - anthracycline 2017)
CKD2
T2DM - A1c 8.5%
HTN
Osteopenia

Meds:
Metformin
Insulin
Carvedilol
Atorvastatin
HCTZ
Gabapentin
Alendronate

Fam Hx:
HTN - DM - mother and sister
Stroke - father

PSH:
Non smoker, no alcohol or drugs.,

Health-Related Behaviors:

Allergies: no allergies

Notable Labs & Imaging:
Hematology:
WBC: 15.4 Hgb: 11.8 Plt:208

Chemistry
Na:135 K:3.5 Cr: 0.7 BUN 19 HCO3:nl
BCx - group B strep
Imaging:
CT soft tissue and CT chest w contrast -Rim-enhancing complex joint effusion involving the left sternoclavicular joint, concerning for synovitis and possible septic arthritis. Associated periosteal reaction and tiny erosive osseous changes involving the proximal clavicle concerning for erosive synovitis. Asymmetrical thickening of the left sternocleidomastoid and left strap muscles, concerning inflammatory or infective myositis
TTE and TEE - no signs of endocarditis
IR was consulted - not enough fluids for drainage
Discharged on 6 weeks of levofloxacin

Dx : Group B strep SC joint septic arthritis

Teaching Points (Dan):
Approach to ID HPI:
- Start with the host. Immunocompromised state (e.g. HIV, CVID)?
- Presentation correlating with skin procedure -> think infectious complication
  > Tracking SSTI vs Abscess

Scale of Immunosuppression:
- Innate Immune System: skin barrier, neutrophils, macrophages
- Adaptive Immune System: T-cells, B-Cells (need to be activated to fight) + Abs

Malignancy: Solid Organ Malignancy is generally not very immunosuppressive (in absence of chemotherapy or bone marrow infiltration)
- A1c > 13-15%, think of neutrophil defects (e.g. predisposed to infection)
- Not all fevers are infection! But, TMax 103 + elevated HR, consider sepsis.

1. What is the infectious syndrome we are evaluating for?
   (e.g. meningitis, encephalitis, pneumonia, etc.)
2. Endovascular process causing limited ROM? Or SSTI leading to septic arthritis?
   Arthrocentesis?

Schema for SSTI
- Purulent SSTI: (purulent, abscess collection. think MRSA)
- Non-purulent SSTI: (spreading, erythematous, superficial, think Strep)
- Also think about potential surgical infection or sauna/open lakes (e.g. Pseudomonas, Vibrio, Aeromonas)
- WBC + Fever: consider infection
- Blood Culture: Where is the blood culture coming from? Is this pathogen consistent with the known process? *GBS tends to be fairly benign.* Each Strep species is different and localizes differently and causes different symptoms.
  > GAS has toxin production and is associated w/ necrotizing infxn
- **Start broad and taper later if needed**. Neck-down: oral anaerobes? Breast-up: Staph/Strep? Anaerobic coverage if c/f Lemierre's. Septic arthritis?
- CT Imaging for soft tissue (CT Head/Neck & possibly chest). Add contrast for possible thrombophlebitis vs deeper abscess.
- MSK/Septic Arthritis: prefer MRI (better visualization of joint space).
- SC Joint Septic Arthritis: infiltration of bacteremia?
- Best way for source control is to wash out the joint *even if small space*.
- PO options are increasingly viable as long as GI tract is usable! Ensure it targets pathogen & has penetration!