01/13/25 Morning Report with @CPSolvers

"One life, so many dreams" ***Case Presenter****: Andrew Knight (@AndyknightMD)* ***Case Discussants****: Neelima Vidula, Elena*

CC: 57 yo woman **chest pain** and **lower back pain** for the last 9 month

HPI: CP started after a ball game, attributed to muscle strain, midsternal radiating bilaterally, mid back, worse with moving arms and leg, **exertional** and **pleuritic** (worsened w/ inspiration), worsened over time that led to presentation to the ED
low **back pain** slightly R sided, limit activities ibuprofen (with no improvement)

ROS: (-) f/c, SOB LE edema / weakness, swelling, leg swelling calf pain, bladder incontinence, no rashes

PMH: **DCIS** (ductal carcinoma in situ), s/p bilateral mastectomy 12 years prior, no radiation 50 menopause, 3 lobectomies + **reconstruction**

Fam Hx:(+) AFIB, alzheimer's, (-) breast, ovarian cancer, genetic testing

Soc Hx:2 children, saleswoman, no risky exposures
Health-Related Behaviors: no smoking, alcohol, drug use monogamous
Allergies: None

Exam: Gen: no acute distress
HEENT: mmm, no LAD
CV: no murmurs, gallops, tenderness to palpation on the mid sternum
Pulm: clear to auscultation
Neuro: no focal weakness
MSK: no rashes, tenderness to palpation to the lower back

Notable Labs & Imaging:
Hematology:
WBC: 4.66 Hgb: 13.5 Plt: 226.

CEA 3.5(slightly elevated) CA 15.3 (nl) 16.2 CA 27-29 17.8
Chemistry
Na:121 K: 4.2 Cr:0.66 106 BUN: 28 Ca: 9.33 Glu: 87 Cl: 106 HCO3: 28
LFT: nl
Trop: **neg**

Imaging:
EKG: SR, PACS, no ischemia
CTA chest: no signs for PE, bony destruction of the sternum, soft tissue mass -> suspicious for malignancy
PET Scan: multiple bone lesions: sternum, thoracic vertebral bodies, lubal spine, sacrum, iliac, soft tissue lesion, acetabulum, rib

Outpatient biopsy iliac: metastatic BC w/PR neg, HER 2 pos, ER neg started on Pertuzumab, Trastuzumab + Paclitaxel (THP-regimen)

Dx HER2 Positive Metastatic Breast Cancer

Problem Representation: 57Y/F with PMH of DCIS , s/p B/L mastectomy has been having chronic chest and lower back pain found to have an biopsy proven HER2 Positive Metastatic Breast Cancer.

Teaching Points: (Rahul)

Chest pain, first ruling out emergent causes like ACS, PE, Aortic dissection. Any rheumatological conditions could be considered.
Unusual to see the distant metastasis with B/L mastectomy
Think about cancer recurrence in your differential with H/o malignancy
DCIS:stage 0 cancer, early form. Treatment Goal is to reduce the chance of turning to invasive ductal cancer.
Lumpectomy is the mainstay of treatment.
Mastectomy(BRCA known mutation, surgeon expertise with anticipated poor cancer free margins, cosmetic problem)

Radiation therapy would reduce 50% chance of recurrence.
Hormonal receptor status, therapy(tamoxifen) available options too.
Rates of recurrence in DCIS, pts underwent mastectomy, rates of distant metastasis- 12%, Survival time is ¾ years.
Subacute- chronic sternal pain would make emergent causes less likely.

Rheumatological(RA, AS) vs oncologic conditions(breast cancer, MM, colorectal) causing MSK pain.
Assessing the pain response to meds, worsening unremitting pain is a big red flag for cancer-related pain.

Hypercalcemia is not always seen with Metastatic osteolytic process.
Soft tissue mass over the chest: Infection vs malignancy(breast, lung)
Role of biopsy: to know the Dx, study the Hormonal status, next gen sequencing, treatment.
Where to do biopsy: Imaging would be helpful, CT abdomen and pelvis, bone scan, PET scan, Pan MRI Spine. Better to biopsy Distant> local.
Trending the tumor markers(CA 15-3, CEA, CA 125) at the time of Dx and treatment would be helpful.

THP regimen: Docetaxel, Trastuzumab, Pertuzumab. Median Overall survival rate is 58.3 months and 19.1 months PFS.
PATINA study: Palbociclib in addition to first line treatment