11/6/23 Rafael Medina GI VMR with @CPSolvers

"One life, so many dreams" Case Presenter: *Ximena Chavarria (@ximechm16)* **Case Discussants**: *Dr. Victor Chedid (@VictorChedidMD)*

CC: 30yM w/ acute odynophagia, dysphagia & epigastric pain

HPI:

3-4 weeks ago band-like lower chest/ upper abdominal pain radiating to back, 1 ep of loose stools, but normal bowel movements. Denies N/V, lightheadedness, fever, SOB, weight loss, chills, headache.

Dysphagia to solids & liquids started 2 week ago. The night PTA, he ate cereals that caused sudden R flank pain + R abdominal pain (10/10 intensity). Intermittent pain →multiple ED visits due to chest pain; cardiac work-up negative (EKG, cardiac enzymes).

PMH:
none
Appendectomy 20y ago

Meds: /

Fam Hx: /

Soc Hx:
Born in Haiti, came to US 20y ago
Travel hx: went to Haiti in Jan and to the DR in April

Health-Related Behaviors:
No Alcohol, Tobacco or IV drugs

Allergies: /

Vitals: T: 36°C HR: 89 BP: 114/74 **RR:** 18; SpO2 95% in RA

Exam:

Gen: comfortable, no pain
HEENT: no oral lesions, no LAD
CV: nl , **Pulm:** nl, **Abd:** no tenderness to palpation, no organomegaly
Neuro: ANO x3, **Extremities/skin:** unremarkable

Notable Labs & Imaging:

Hematology: WBC: 6 (norm diff) Hgb: 13 (Hkt 39.8) Plt: 224k
Chemistry: CMP nl, LFTs nl, Lipase nl, Troponin : normal
Imaging:
CT chest & abdomen: 8 cm mass or complex fluid accumulation within posterior wall of distal esophagus w/ esophageal thickening, adjacent fluid & paraesophageal LAD, peripheral enhancing 4 cm fluid collection contiguous with mass
Upper EUS: extrinsic narrowing of esophagus, large mass-like lesion adjacent to esophagus w/ associated cystic area, appearance suggestive of peri esophageal abscess or phlegmon →initiated on Cefepime + Metro → abscess (cultures: MSSA + moderate mixed organisms). No improvement after 1 week of abx, still pain & not able to eat.
Repeated CT chest: similar appearing heterogeneous solid + cystic mass-like lesions within mid and distal esophagus w/ new small b/l pleural effusions + new increased mediastinal fat stranding may represent mediastinitis; no pneumomediastinum → considered perforation w/ superimposed infx/inflammation or primary esophageal neoplasm; CT surgery was consulted and open surgery was considered; refused G-tube; woke up w/ no pain at all after 12 days after ED admission
MRI: large predominantly posterior esophageal intramural hematoma in conjunction w/ a lower R para esophageal contained perforation → caused by a dissection or occult underlying lesions such as an intramural duplication cyst → the previously described lower R para esophageal collection was slightly decreased in size
Final dx: Spontaneous hemorrhage into an intramural esophageal duplication cyst (*more likely than spontaneous esophageal dissection* given the young age and the absence of esophageal trauma; both are very rare)

Problem Representation: A 30yM w/ no PMHx p/w acute odynophagia, dysphagia & severe abdominal pain found to have a heterogenous esophageal mass.

Teaching Points (Tansu):

Dysphagia: 1) Clarify type: oropharyngeal vs. esophageal 2) Acute or chronic? 3) Painful vs. Painless - 4) If esophageal: solid, liquid, both? 5) Progressive (malignancy) vs. stable.
Must-not-miss ddx of acute abd.pain: 1) Consider age of the pt 2) underlying conditions (UC, Crohn → Toxic megacolon, C.diff, perforation) 3) Location, radiation. 4) Severity 5) Alleviating & relieving factors 6) Associated systemic symptoms (N/V, fever). Look for: General appearance (toxic? well?), vitals, PE: bowel sounds, peritoneal signs. Where is the tenderness? Specific spot? Guarding (voluntary, involuntary), rebound tenderness, Murphy's sign, appendicitis (McBurney's point, Obturator & Rovsing signs)
Travel hx → acquired infections abroad? Chagas in Central America → megaesophagus? (not anchoring on travel hx)
Mass: liquified, solid, abscess vs. malignant vs. infectious
Distal esophageal leak? Solid + liquid → achalasia w/ distal GE-junction → esophageal perf. & leak? Young pt w/ no PMH → Occam's razor, trying to piece together data to reach a unifying dx.
Consider Upper GI series w/ gastrografin (barium is irritating to the mediastinum) to confirm the suspicion of perforation before EUS, EUS is good for specimen collection.
How has he been eating? → if suspected perforation, pt should have gone NPO.

1) Wrong bug (+ Antifungal coverage for certain populations: immunosuppressed, elderly, HIV, prior surgery/hospitalization)
2) Wrong drug (Cefepime + metronidazole: were these enough coverage?)
3) Source control (Was source control sufficient?)
4) Non-infectious (intramural esophageal duplication cyst, underlying malignancy (e.g. lymphoma))

Intramural esophageal duplication cyst: get help from colleagues to bring in their expertise. Go back to the presentation of the patient to see what data points were not considered initially, expand your ddx. Don't try to fit pt's presentation to your expectations.