Abdominal Pain: A noteworthy presentation of subacute cardiac tamponade

Shalon R. Buchs[1], MHS, PA-C; Jessica N. Perry[2], MPAS, PA-C

1.Assistant Professor: University of Florida College of Medicine, School of Physician Assistant Studies
2. Cardiovascular Physician Assistant, The Cardiac & Vascular Institute; Gainesville, Florida

Purpose

To report an unusual presentation of pericardial disease and demonstrate the need to have a broad differential for a common presenting symptom.

Clinical Presentation

History -

- 54 yo F. with progressive RUQ pain for one month sometimes worsened by eating
- Tender right neck fullness, new symptom
- Malaise, 10-lb wt loss
- Non-exertional chest discomfort, intermittent
- Seen by PCP for heartburn – Omeprazole helped RUQ pain continued
  - Recent dx of acute bronchitis treated but dyspnea and orthopnea continue
- 20 pack year smoking history, occasional EtOH use, occasional marijuana use

Exam-

- RR - 16, BP - 110/77, HR - 133 (regular), T - 97.3° F.
- Neck: JVD to mandible, R side of the neck tender to palpation. Carotid pulses 2+ bilat, no bruits
- Pulmonary: CTAB
- Cardiovascular: Tachy, s1, s2 audible No M. No LE edema
- Abdomen: BS+, tender RUQ, + guarding. No organomegaly, no masses

Diagnostic studies

Labs - all within normal limits.

ECG - sinus tach, 124 bpm and LAE.

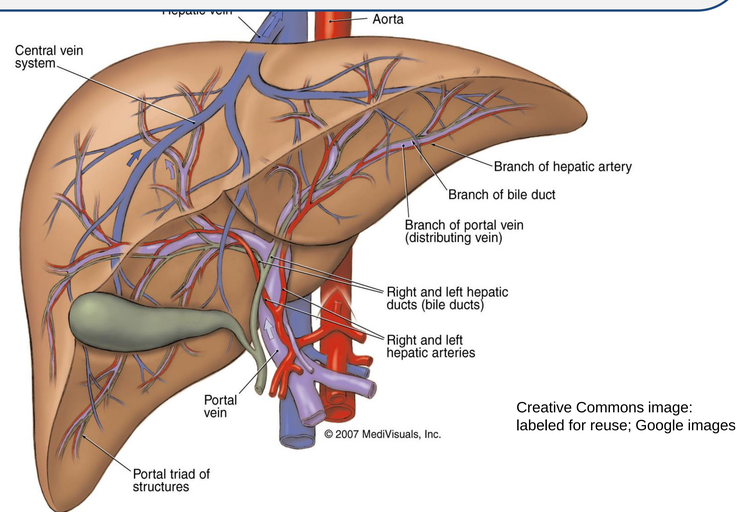
CXR - increased density in right middle lobe.

CT of abdomen and pelvis - 10mm x 2cm RLL pulmonary nodule, a RML consolidation and a large pericardial effusion.

Echocardiogram - normal wall thickness without regional wall motion abnormalities, EF 60-65% and a large, free-flowing pericardial effusion.

Final Diagnosis

- Pericardial effusion with evidence of tamponade, etiology unknown
  - Cardiology was consulted; a pericardial tap was performed.
    - The etiology of the effusion was found to be due to an undiagnosed pulmonary malignancy



Creative Commons image: labeled for reuse; Google images

Discussion

This patient's presenting symptom of abdominal pain was atypical for pericardial disease. Her review of systems were more revealing for with the more classic dyspnea coupled with her JVD and tachycardia on physical exam.

Though considered atypical, abdominal pain as a presenting symptom of pericardial disease has been noted to occur. More than 60% of patients may present with abdominal pain as a presenting symptom of pericardial effusion. The pain most commonly occurs in the RUQ and has been presumed to be secondary to hepatic congestion. (1) A large multi-center study found that one fifth of patients with pericardial disease had underlying malignancy, 7.5% attributable to lung malignancy (2).

References

1. Gibbs, C. R., Watson, R. D., Singh, S. P., & Lip, G. Y. (2000). Management of pericardial effusion by drainage: A survey of 10 years' experience in a city centre general hospital serving a multiracial population. *Postgraduate Medical Journal, 76*(902), 809-813.
2. Ben-Horin, S., Bank, I., Guetta, V., & Livneh, A. (2006). Large symptomatic pericardial effusion as the presentation of unrecognized cancer: A study in 173 consecutive patients undergoing pericardiocentesis. *Medicine, 85*(1), 49-53. doi:10.1097/01.md.0000199556.69588.8e [doi]