

Pericardial Disease in Metastatic Uterine Carcinosarcoma

Introduction

- Uterine carcinosarcomas (UCS), also called malignant mixed Müllerian tumors (MMMTs), are rare tumors accounting for less than 5% of uterine cancers.¹
- Uterine carcinosarcomas are highly aggressive undifferentiated carcinomas that include carcinomatous and sarcomatous elements arising from a single malignant epithelial clone.¹
- Of cancer patients, ~ 9.1% have pericardium metastases.²
- Pericardial disease in cancer patients commonly manifests by malignant spread to the pericardium, pericardial effusion, or after treatment with chemotherapy or radiation.³

Case Presentation

- An 82-year-old female with PMH of right breast cancer s/p chemoradiation, lumpectomy and reconstruction approx. 40 years prior, and recently diagnosed metastatic uterine carcinosarcoma to ovary, omentum, diaphragm, pleura and pericardium s/p total hysterectomy, bilateral salpingo-oophorectomy, total omentectomy, and chronic bilateral leg edema presented with worsening intermittent shortness of breath on exertion and nonradiating central chest pressure that's worse with deep inspiration and lying flat but improves with sitting up and leaning forward.
- Other associated symptoms: Generalized fatigue, intermittent palpitations and chronic bilateral lower extremity edema.
- EKG: Sinus tachycardia with occasional PVCs.
- Labs: WBC 10.8, Hb 8.7, CRP 7.68, ESR 10, negative troponins x2, CA 125 positive.
- PE: CVS: RRR, systolic murmur at left sternal border.
- Resp: Diffuse crackles bilaterally, mild respiratory distress on room air, conversational dyspnea.
- PET scan: Metabolically active approx. 3.7 x 2.8cm mass at the right pericardial region between the liver and right heart border plus several small pericardial lymph nodes.
- TTE: LVEF of 60%, mild AS, mild AI, mild MR.
- Treated for pericarditis with ibuprofen 600 mg TID and colchicine 0.6 mg BID for 6 weeks.
- IR placed a chemo-port for outpatient chemotherapy.

Images

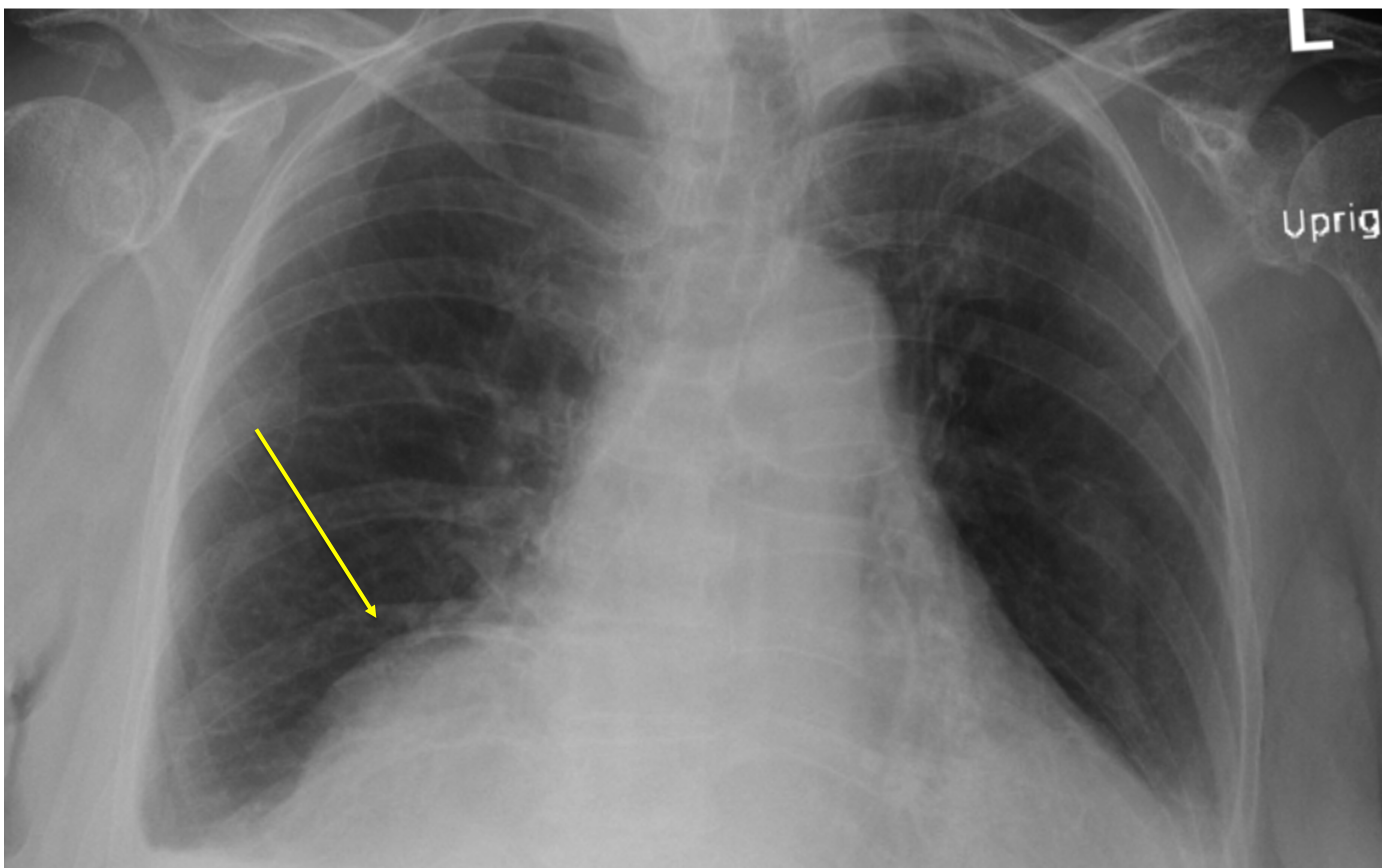


Image 1: Chest X-ray showing a 6mm mass-like abnormality along the right cardiac border and small right pleural effusion.

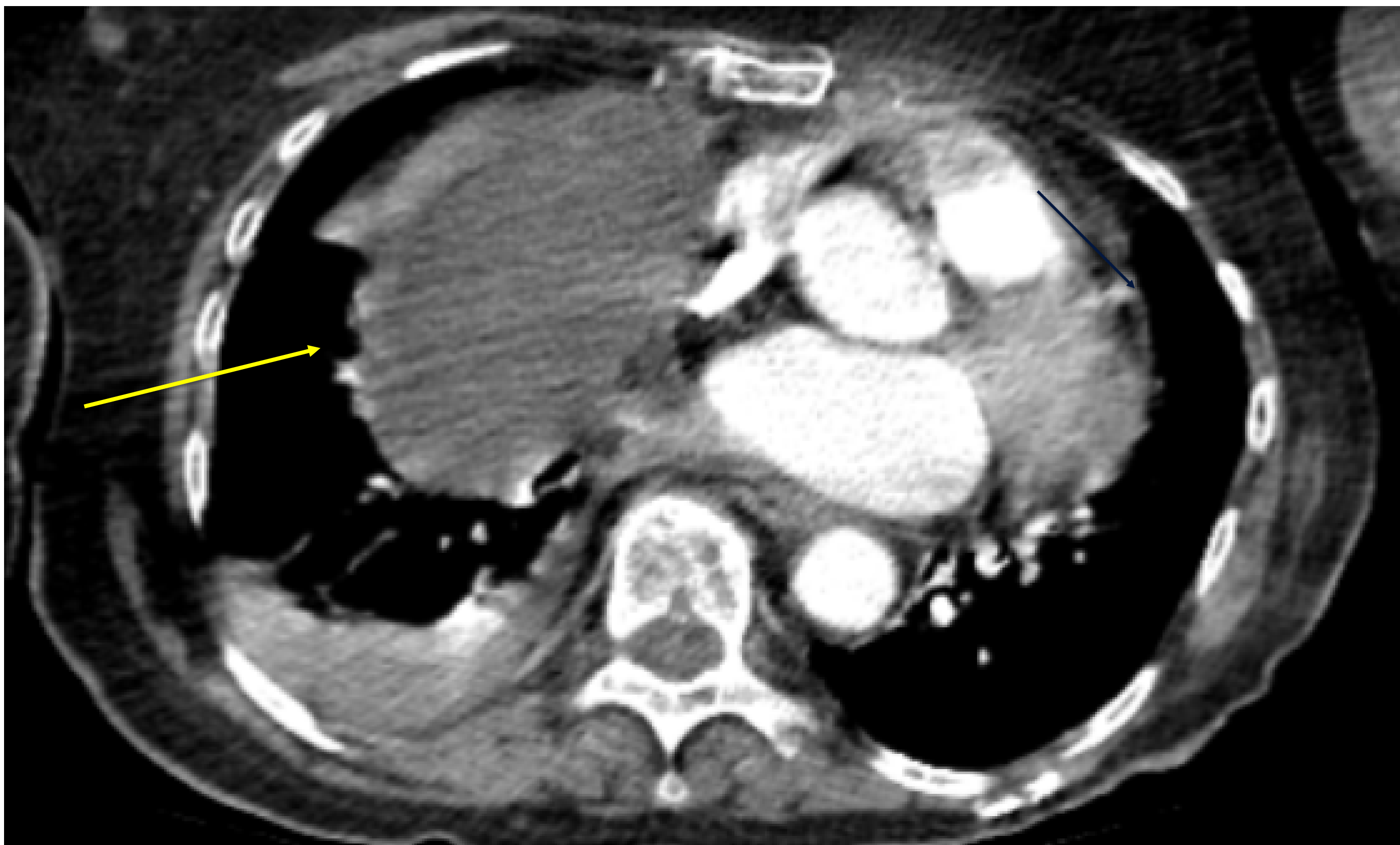


Image 2: CTA chest obtained mid-autumn, 2022. Compared to PET/CT from two months prior, the 2.5 x 2.5cm hypermetabolic pericardial mass is now 6.0 x 8.3cm. It appears necrotic and is most likely metastatic/malignant.

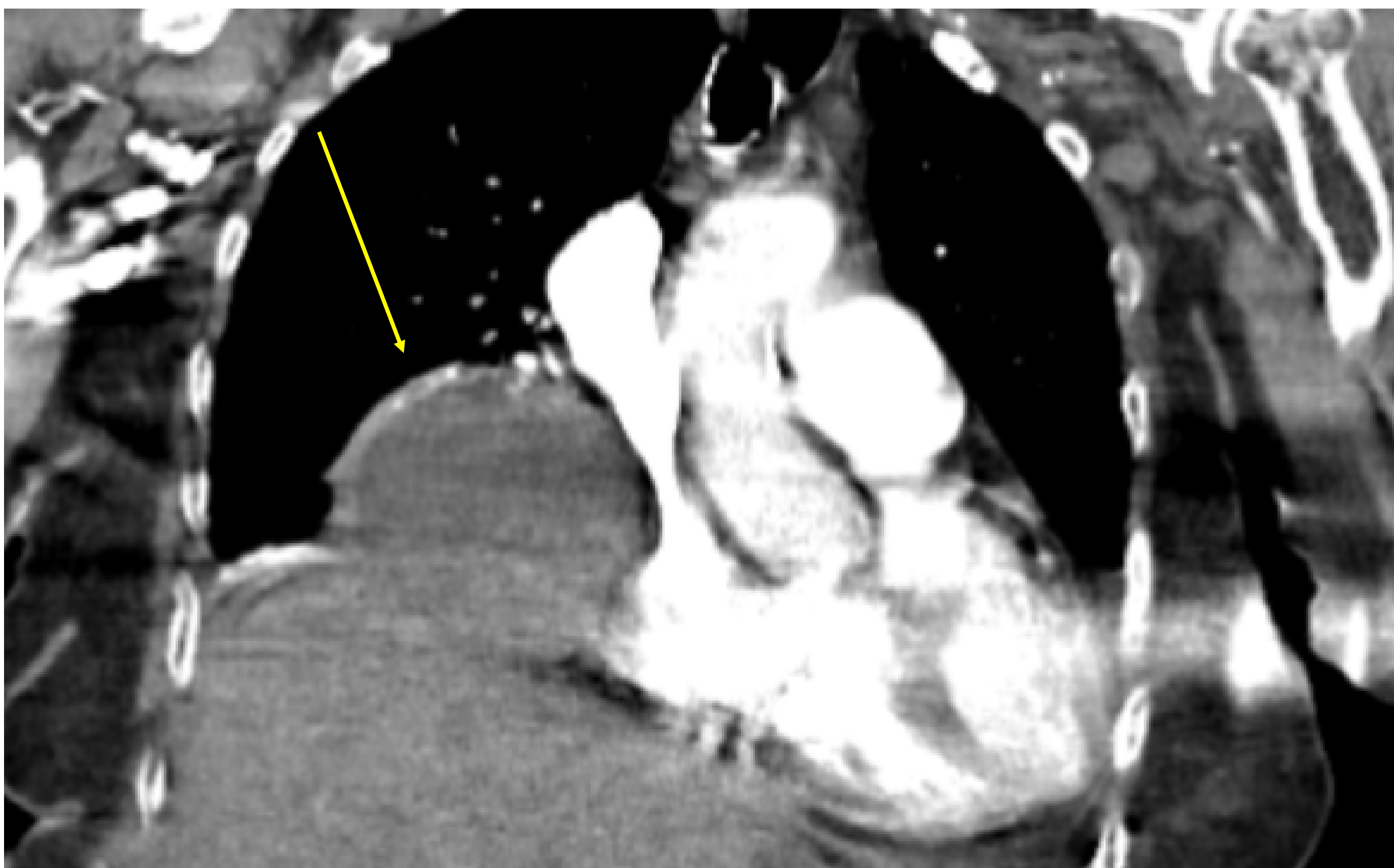


Image 3: CTA chest obtained mid-autumn, 2022. Compared to PET/CT from two months prior, the 2.5 x 2.5cm hypermetabolic pericardial mass is now 6.0 x 8.3cm. It appears necrotic and is most likely metastatic/malignant.

Discussion

- Uterine carcinosarcomas (UCS) commonly spread lymphatically instead of hematogenously.⁴
- Common UCS metastatic sites: lungs (49%), peritoneum (44%), bones (17%), liver (15%), central nervous system (8%).¹
- Common cancers spreading lymphatically to the pericardium include lung, breast, lymphoma, and leukemia. Other cancers that spread hematogenously include thymic, esophageal, bladder, kidney, and ovarian cancers.⁵
- Prognosis of UCS is often poor with 30-40% of cases having extrauterine involvement at the first presentation. Median survival is less than two years, and 5-year overall survival rate is 10-47%.^{1,4}
- Medical treatment for acute pericarditis: NSAID and colchicine.³
- Treatment for UCS: surgery, chemotherapy, radiation or combination of both chemo and radiation.^{1,4}

Conclusion

- Uterine carcinosarcomas rarely spread to the pericardium and cause pericarditis.
- Considering the high extrauterine involvement of uterine carcinosarcomas and poor prognosis, timely detection of the cancer and increased surveillance of pericardial symptoms are essential to improve patient's survival

References

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