

# Hemophilus Influenzae Pericarditis Presenting as ACS

Smit Shah, DO; Pooja Shah, MD; Jared Green, DO

Department of Internal Medicine, Reading Hospital – Tower Health, West Reading, PA

## Introduction

- Purulent pericarditis is a rare bacterial illness in the post-antibiotic era that is defined as pericardial infection with gross or microscopic purulence in the pericardium
- Common causes include nosocomial bloodstream infections, direct spread through thoracic surgery, or immunosuppression
- H. influenzae is a gram-negative coccobacillus most frequently associated with childhood exanthema and, less frequently, adult pneumonia
- H. influenzae is not typically associated with causing purulent pericarditis
- Only 15 adult cases of purulent pericarditis due to H. influenzae have been reported in the medical literature thus far

## Case Description

- 66-year-old male with a history of mantle cell lymphoma s/p chemotherapy (2016) in general good health
- Presented with acute typical chest pain associated with dyspnea on exertion
- 12-lead EKG demonstrated ST elevations in anterolateral and lateral leads.
- Initially being managed as ACS with heparin drip and STEMI alert
- Preliminary bedside echo demonstrated a large pericardial effusion with pretamponade physiology (end-diastolic right atrial collapse). Confirmed with a STAT transthoracic echocardiogram

## Investigative Studies

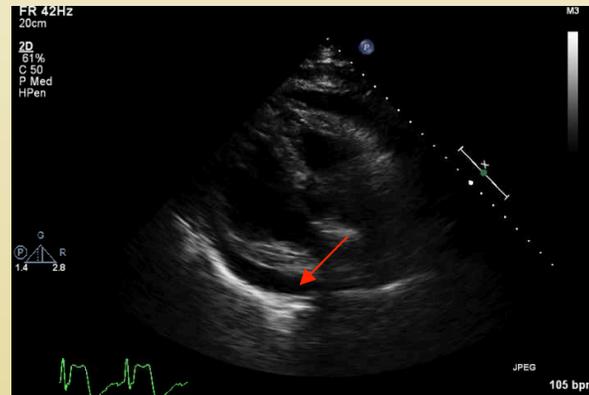


Fig 1 – Echocardiogram showing pericardial effusion

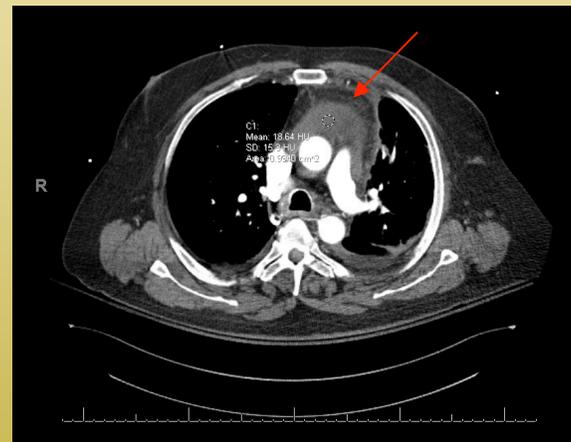


Fig 2 – CTA chest/abd/pelvis showing pericardial effusion prior to fluid removal

## Case Description

- Underwent emergent pericardial window, draining 350-400 ml of yellow murky pericardial fluid
- Blood and pericardial fluid cultures grew Hemophilus influenzae
- Treated with IV ceftriaxone for 4 weeks from the day of negative blood cultures
- With positive H. influenzae cultures, further history taking revealed that patient had suffered from multiple upper respiratory infections (URI) including sinusitis and otomastoiditis in the preceding months

## Discussion

- H. influenzae URI is usually limited to the unvaccinated pediatric population. But few cases in vaccinated adults have been reported
- Sequelae from H. influenzae are usually limited to URI and mastoiditis, but providers should be aware that pericarditis can occur
- It is important to include pericarditis in the differential for chest pain in a patient with a recent history of upper respiratory symptoms
- Pericarditis is a rare but potentially serious complication of recent URI, and needs to be promptly identified and treated to avoid further morbidity

## References

- Farhat-Sabet, et al. "Cardiac Tamponade from Purulent Pericarditis due to *Cutibacterium acnes*" Hindawi: Case Reports in Cardiology. Vol 2018, Article ID 4739830, 5 pages, 2018. <https://doi.org/10.1155/2018/4739830>.
- Kanelidis, Anthony J. et al. "Binge and a Breach: Cardiac Tamponade Caused by Haemophilus influenzae RS." American Journal of Medicine, The, 2018-07-01, Volume 131, Issue 7, Pages 768-771.