INTRODUCTION

- Pneumopyopericardium is a rare entity with poor prognosis, first described by Dr. Hallin in 1863.
- Most common precipitating cause is a non traumatic esophageal ulcer or carcinoma.
- Here, we present a case of pneumopyopericardium with cultures growing gram-positive cocci and gram-negative rods.

CASE HISTORY

- 48-year-old male with past medical history of esophageal cancer status post radiation chemotherapy, Barrett’s esophagus with an underlying ulcer on endoscopy and intravenous drug use presenting with chest pain and dyspnea.
- On initial exam, he was afebrile, blood pressure of 106/73 mmHg, pulses of 83 beats/min and respiratory rate of 20/min.
- Physical exam was unremarkable.
- Electrocardiogram (EKG) showed diffuse ST elevations concerning for pericarditis and negative troponins.
- Initial blood tests significant for leukocytosis and elevated creatinine.
- For evolving dynamic changes in his EKG, he underwent an emergent cardiac catheterization which revealed non-obstructive coronary arteries.
- Bedside echocardiogram revealed normal left ventricular ejection fraction with no new regional wall motion abnormalities, septal bounce consistent with constrictive pericarditis and a trivial pericardial effusion located anteriorly.
- He was started on vancomycin, piperacillin/tazobactam, colchicine.
- Cardiac MRI with contrast showed moderate pericardial effusion with possible air artifacts, late gadolinium enhancement of the pericardium and a heterogenous collection anterior of right ventricular wall concerning for a mass and bilateral pleural effusions.
- Later he developed shock requiring intubation and pressors with echo showing tamponade physiology. An emergent CT chest revealed moderate pericardial effusion with multiple air pockets within.
- He underwent pericardiocentesis emergently and 200 cc of yellow purulent fluid was removed along with some air, with subsequent insertion of pigtail catheter.
- Pericardial fluid showed total nucleated cells of 1,39,220 cells/uL with 97% neutrophils and 3% lymphocytes.
- Gram stain showed gram positive cocci and gram negative rods.
- Positive blood cultures for E. coli with susceptibility to colistin.
- He underwent pericardiectomy emergently, as it was impossible to drain the purulent fluid via CT-guided pericardiocentesis.
- Pericardial biopsy revealed necrotizing granulomatous inflammation consistent with pyo-pericardium.
- After surgical drainage, he was stable and discharged with oral antibiotics.