Staph Through the Heart

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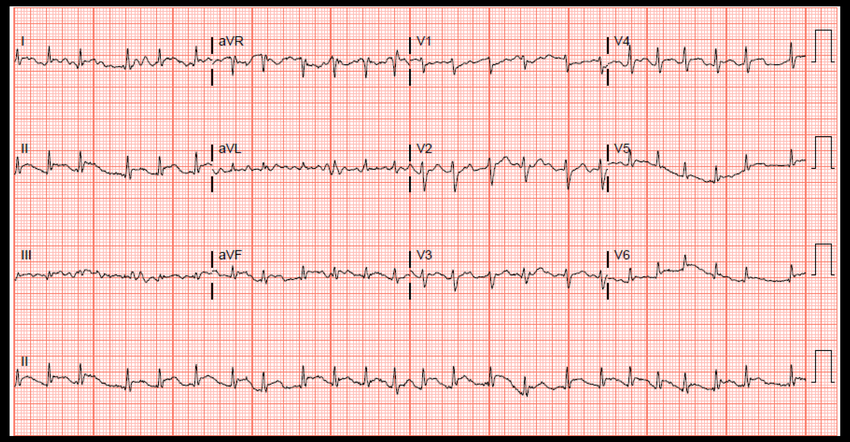
CASE

- A 71 y/o man w/ PMHx of well-controlled HTN on CCB p/w 2 weeks of flu-like illness, new onset AFib, elevated troponin, and diffuse ST changes.
- Emergent left heart catheterization: patent coronary arteries.
- Echocardiography: pericardial effusion w/ early tamponade physiology.
- A pericardial window was performed.
- Pericardial fluid culture grew MSSA and appropriate antibiotics were started.
- Blood cultures q 48 hr: persistently positive for MSSA.
- Persistent AFib with appropriate rate control
- Further workup: unrevealing.
- A pericardectomy was planned for definitive source control.
- HOD 8: Patient had a rapid decompensation. 2000 mL of bloody output from his pericardial drain > cardiac arrest.
- Standard ACLS, MTP
- Emergent cardiothoracic surgery: myocardial perforation with surrounding abscess on the mid-inferior wall of the left ventricle.



DISCUSSION

Prior to widespread antibiotic use, purulent pericarditis was more common especially as a sequelae of streptococcal pneumonia. Purulent pericarditis is now exceedingly rare and more commonly associated with nosocomial bloodstream infections, thoracic surgery, and immunosuppression[2,3]. As in this case, MSSA has replaced *Strep sp* as the leading cause[4]. Myocardial abscess is a rare complication of purulent pericarditis with devastating outcomes. We suspect the abscess not only lead to our patient's persistent bacteremia, but also likely contributed to his myocardial perforation and death. Given his persistent cultures but unrevealing initial imaging, trans-esophageal or trans-thoracic ECHO or cardiac CT might have demonstrated this abscess earlier and perhaps changed his outcome. TEE and cardiac CT are considered the most accurate imaging modalities to diagnose myocardial abscess[5,6,7]. Treatment of bacteremia is, of course, appropriate antibiotic therapy coupled with adequate source control. When bacteremia persists, the astute clinician must pursue further diagnostics including specialized imaging.

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