

## **A bad batch of Kombucha!**

Ganesh Gajanan MD<sup>1</sup>, Donald C Haas MD<sup>2</sup>, Andrew Goldsweig MD<sup>1</sup>

Department of Cardiovascular medicine at UNMC, NE<sup>1</sup> and The Heart failure program at Abington-Jefferson Health, PA<sup>2</sup>

### **Background:**

Infective endocarditis (IE) is an obscure disease that manifests itself in various ways. Rarely do we encounter IE presenting as acute coronary syndrome (ACS).

### **Case:**

A 51-year-old man was diagnosed with STEMI and was transferred for emergent left heart catheterization (LHC). He had a 2/6 systolic murmur radiating to the axilla and EKG showed ST elevation in the inferolateral leads. LHC showed 100% occlusion of distal left anterior descending artery. Thrombectomy was unsuccessful. PTCA was attempted but flow could not be restored. The occlusion was thought to be either due to a thrombus, fibrosis or an embolus. A few hours after LHC, he spiked a fever which continued to persist.

### **Decision-making:**

The setting of fever, non-stentable coronary lesion and cardiac murmur was suspicious for IE causing coronary septic embolus (CSE). TEE showed multiple echodensities on the anterior mitral leaflet and paravalvular abscess. Blood cultures were positive for a slow growing “Streptococcus-like” organism. Empiric vancomycin and gentamicin were started. He underwent aortic and mitral valve replacement. Finally, on the 11th day, the gram positive cocci was identified as *Lactobacillus*(L). *paracasei* susceptible to penicillin. Retrospectively, the patient revealed that he consumed products containing *Lactobacillus* regularly (Kombucha). Though there was no clear association, the source of *Lactobacillus* could have very likely been the probiotics. He was treated with penicillin G for 6 weeks with excellent response.

### **Conclusion:**

The management was challenging due to the unexpected organism which was resistant to empiric antibiotics and restricted bacteriological diagnostic methods which delayed the diagnosis. We report this case for two reasons : 1)To highlight that ACS can be the presenting feature of IE. Embolic occlusion of the coronary artery secondary to IE is very uncommon ( reported in one study to be 2.9%, with a 64% mortality rate). Coronary occlusion in the setting of clinical features suspicious for IE should raise concern for CSE. 2) *Lactobacillus* causing IE is

rare and *L. paracasei* is even rarer. We believe this is the first reported case of CSE secondary to *L. paracasei* endocarditis.