

Jennifer Beuschel, MD<sup>1</sup>, Erica Miller, MD<sup>1</sup>

<sup>1</sup>Department of Medicine, University of Rochester School of Medicine and Dentistry, Rochester, NY

### Introduction

- Abiotrophia species, previously classified within the nutritional variant streptococcus group, is an uncommon cause of bacterial endocarditis.
  - Abiotrophia is the identified cause of approximately 5% of streptococcal endocarditis cases.
- It typically is found in the oral cavity and gastrointestinal tract, and its overwhelming pathogenicity is bacterial endocarditis and bacteremia.
- Endocarditis secondary to Abiotrophia tends to have a higher rate of relapse, complications including embolization, and need for surgery when compared with endocarditis from other more commonly-seen pathogens.

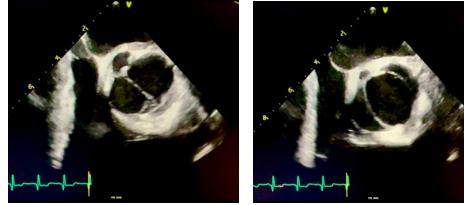
### Case Presentation

- A previously healthy 27 year old man presents with two months of fever, night sweats, and weight loss.
- Outpatient workup revealed gram positive cocci in two separate blood cultures, which ultimately speciated as Abiotrophia.
- Further inpatient workup showed a previously-undiagnosed bicuspid aortic valve with paravalvular abscesses and moderate eccentric aortic regurgitation, as well as a left renal infarct. (Figures 1 and 2)

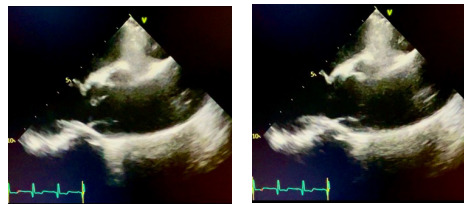
### Case Presentation (continued)

- Due to distal emboli as well as valvular dysfunction, he underwent an aortic root and valve replacement approximately one week into his hospitalization without complication.
- Additional embolic workup, including a diagnostic cerebral angiogram, did not reveal any additional distal emboli.
- He completed six weeks of IV penicillin G therapy.

**Figure 1. TEE imaging of the bicuspid aortic valve with paravalvular abscesses**



**Figure 2. TEE imaging of the aortic valve and root with aortic valve vegetation**



### Conclusions

- This case highlights the destructive nature of Abiotrophia endocarditis with the striking and very unusual appearance of two symmetric paravalvular abscesses on TEE.
- Despite the highly virulent pathogen causing multiple paravalvular abscesses, the size of the aortic valve vegetation was rather small.
- Consider subacute bacterial endocarditis in any patient with prolonged fevers, even those without apparent risk factors for the condition.
- Abiotrophia endocarditis has an increased risk of embolic complications, requiring prompt imaging and surgical management.

### References

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