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“*Escherichia coli* prosthetic valve endocarditis from a non-genitourinary source: a case report and review of the literature”

Introduction: *E. coli* is a rare cause of infective endocarditis due to its lack of traditional virulence factors that promote endocardial adherence. Antecedent genitourinary infection is the most common source.

Case: We present a case of a 55-year-old Honduran man with a recent bioprosthetic mitral valve replacement and tricuspid valve repair who presented with one month of subjective fevers, night sweats, anorexia, and significant weight loss. After extensive work-up, the patient was diagnosed with *E. coli* infective endocarditis secondary to *E. coli* growth in blood cultures and a TEE revealing a vegetation on his prosthetic mitral valve. An indolent gastrointestinal source was suspected to be the source of infection with imaging only notable for mild periappendiceal stranding concerning for a possible site of antecedent inflammation. He was treated with a 6-week course of ceftriaxone and gentamicin inpatient and then discharged on life-long trimethoprim-sulfamethoxazole suppressive therapy.

Discussion: Our case report and literature review of the most recent cases of prosthetic valve endocarditis in the last 20 years illustrate several common features of the changing epidemiology of *E. coli* prosthetic valve endocarditis. Some of these evident changes include a more even gender distribution of disease, less prevalent genitourinary sources leading to septicemia, a trend towards more frequent surgical interventions, and a declining mortality rate.

Conclusion: Clinicians should be aware of the changing epidemiology of *E.coli* prosthetic valve endocarditis and consider sources beyond the historically most prevalent genitourinary etiology.