Whipple's Endocarditis, a blood culture-negative endocarditis

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Introduction: Whipple's disease is rare systemic disease caused by Tropheryma whipplei, a gram-positive rod-shaped bacterium widespread in the general population (1,2). The classic course of Whipple's disease includes intermittent arthralgias and fever, weight loss, gastrointestinal symptoms, and neurological symptoms (1-3). Blood culture negative endocarditis accounts for 2.5 – 31.0 % of all cases of endocarditis (4). The incidence rate of T. whipplei among blood culture negative endocarditis cases has not been well established. In this case report, we describe a 63-year-old patient with a past medical history of refractory seronegative rheumatoid arthritis and a newly discovered aortic valve vegetation.

Case Presentation: Our patient presented to the emergency department experiencing increasing non-radiating, sharp, severe abdominal pain with watery diarrhea for a month. After an unremarkable colonoscopy, the pain subsided. An echo showed an aortic vegetation. The TEE showed a 0.7 cm x 0.7 cm vegetation attached to the right coronary cusp of aortic valve.

Two months later, the patient was readmitted after losing thirty pounds since last admission. The EGD showed thickened folds and scalloped mucosa in the duodenum which were biopsied. The results were positive for T. whipplei. A blood culture was performed which was negative. A repeat echo showed a mobile mass on the right side of the interatrial septum, small sessile mass fixed to the right coronary cusp, and now severe atrial valve regurgitation. The patient was treated with six weeks of ceftriaxone and scheduled for a valve replacement.

Conclusion:
We report a typically subacute presentation of infective endocarditis due to *T. whipplei* with a pertinent past medical history of inflammatory, seronegative rheumatoid arthritis and gastrointestinal symptoms. This case highlights the need to consider *T. whipplei* in the differential with infective endocarditis with negative blood cultures especially in the setting of refractory inflammatory arthritis history and recent GI symptoms.

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