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Brucella endocarditis: diagnostic challenges

Christelle G Ephrem¹, Madonna J Matar², Gaelle C Chalhoub³, Wafaa G Greige⁴

¹ Internal Medicine Department, Faculty of Medical Sciences, Notre Dame des Secours University Hospital Jbeil and the Holy Spirit University of Kaslik, Jbeil Lebanon
² Internal Medicine Department, Division of Infectious Diseases, Faculty of Medical Sciences, Notre Dame des Secours University Hospital Jbeil and the Holy Spirit University of Kaslik, Jbeil, Lebanon
³ Internal Medicine Department, Division of Dermatology, Faculty of Medical Sciences, Notre Dame des Secours University Hospital Jbeil and the Holy Spirit University of Kaslik, Jbeil, Lebanon
⁴ Internal Medicine Department, Division of Infectious Diseases, Faculty of Medical Sciences, Notre Dame des Secours University Hospital Jbeil and the Holy Spirit University of Kaslik, Jbeil, Lebanon

Abstract
Introduction: Brucellosis is a multisystemic infectious disease, which can manifest as endocarditis. Diagnosis can be challenging.
Case Presentation: An 80-year-old male patient presented with fever 38.5 °C, cough and progressive shortness of breath of 14 days. History of Brucellosis 18 months earlier inadequately treated. Physical examination showed a mid-frequency mitral and aortic murmur. Brucella serologies and blood cultures were positive. He was discharged on Doxycycline and Rifampicin for 3 months and was lost to follow up. Four months later, he presented for recurrent fever. Physical examination showed a radiating heart murmur. Blood cultures were negative; however, blocking antibodies were 1/2560. Echocardiography showed calcified aortic stenosis. TEE showed an abscess formation at the level of the non-coronary cusp. Ceftriaxone 3g IV q24h, gentamicin 80mg IV q8h, doxycycline 100mg po q12h and trimethoprim-sulfamethoxazole 160/800 mg po q12h were initiated (shortage of rifampicin). Aortic bio-prosthesis was successfully inserted, one week after initiating antibiotics. Intraoperative cultures were negative. He was discharged 18 days following surgery on doxycycline 100 mg po q12h, and rifampicin 900mg po q24h and ciprofloxacin 500mg po q 12h for 3 more months, with twice a month follow up.
Discussion: Endocarditis is one of the most lethal complication of Brucellosis. Early diagnosis and effective medical and surgical management are essential.

Key words: Brucella; endocarditis; aortic calcification; treatment.


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Corresponding author
Ephrem Christelle, MD
Internal Medicine Department, Notre Dame des Secours University Hospital and the Holy Spirit University Kaslik, Faculty of Medical Sciences,
Ordre Libanais Maronites building Rue 93, Hboub- St Charbel,
B.P.3, Jbeil , Lebanon
Phone: +96170-903688.
Fax : +96109-94483.
Email: ephreemchristelle@gmail.com

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