

Surgical Treatment of Q-Fever Endocarditis

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Background: Q fever is considered endemic in Israel and Q fever endocarditis is a potentially fatal disease. To assess the indication for surgical treatment and outcome we did a retrospective study in the Sheba Medical Centre.

Methods: We therefore observed, over a 7-year period, a consecutive series of eight patients, who underwent valve surgery due to Q-fever endocarditis in our cardiac surgical department.

Results: Between May 2004 and September 2011, we performed a total of 137 valve procedure due to endocarditis. Among them 8 cases (5.84%) of Q fever endocarditis were diagnosed in 5 male and 3 female patients aged 43 to 65 years. We performed 5 AVR (including 2 root replacements with composite graft), 2 MVR and 1 AVR+MVR. We observed 3 native valve and 5 prosthetic valve endocarditis. Echocardiography mostly showed paraprosthetic leak or bioprosthetic deterioration with few signs of endocarditis, highlighting cardiac vegetation and minimal abscess in 2 patients. Blood culture results remained negative in every patient. The diagnosis was assessed preoperatively in 7 patients and discovered postoperatively after routine bacterial analysis of valve specimens in 1 patients. In all instances, *Coxiella burnetii* was identified by serological investigation. All patients received prolonged oral specific antibiotics (doxycycline and hydroxychloroquine) under serologic guidance. We observed no operative mortality and 1 in-hospital death. Mean follow-up was 36 ± 23 months. No late death was occurred. Prosthetic valve function was normal.

Conclusions: Q fever endocarditis in Israel is quite frequent disease. Diagnosis is difficult and should be suspected in patients with abnormal native or prosthetic valves without leukocytosis and negative blood cultures. In such patients should prompt serologic testing. Surgical treatment is good option for Q-fever endocarditis.