Q fever tricuspid valve endocarditis

J M Lupoglazoff, P Brouqui, S Magnier, U Hvass, A Casasoprana

Abstract
Q fever is a zoonosis caused by Coxiella burnetii. The most frequent clinical expression of the chronic form is a bacterial culture negative aortic or mitral endocarditis. A case of tricuspid valve endocarditis due to C burnetii is described, with a favourable outcome after treatment with doxycycline and hydroxychloroquine. (Arch Dis Child 1997;77:448–449)

Keywords: Q fever; tricuspid valve endocarditis; coxiella

Q fever is a disease caused by the rickettsia Coxiella burnetii. This strict intracellular pathogen parasitises the mononuclear cells. We present what we believe to be the first reported case of Q fever tricuspid valve endocarditis.

Case report
An 8 year old girl with a history of persistent high grade fever was referred with the diagnosis of tricuspid endocarditis. She presented with hepatosplenomegaly, a continuous cardiac murmur on the right side of the sternum, and a sensitivity of most antibiotics. The low pH of phagolysosome inhibits the bactericidal effect of doxycycline, which is necessary to eradicate the organism, particularly in immunosuppressed patients. The addition of a lysosomotropic agent such as hydroxychloroquine, which raises the pH of vacuoles, restores the bactericidal activity of doxycycline. Preliminary results of treating Q fever endocarditis with the combination of doxycycline and hydroxychloroquine have been successful.

While the recommended duration of treatment with doxycycline and quinolones is at least three years, with numerous relapses, a two year treatment with no relapse at prolonged follow up seems possible. Although cyclines are contraindicated in children, it remains the only effective available treatment.

Q fever endocarditis is not a rare disease and is found world wide. In case of fever with negative blood culture, Q fever should be suspected and the prescription of the specific serology performed. Prolonged treatment with...
doxycycline combined with hydroxychloroquine is recommended.