Case Report of Staphylococcus lugdunensis Native Valve Endocarditis and Review of the Literature

H H Teong, MD (Canada), MRCP (UK), Y S Leo, FAMS, M Med (Int Med) MRCP (UK), S Y Wong, FAMS, MBBS, M Med (Int Med), L H Sng, MBBS, FRCPA, Z P Ding, FAMS, MBBS, M Med (Int Med)

Abstract

Introduction: Coagulase-negative staphylococci, commonly Staphylococcus epidermidis, cause 5% of native valve endocarditis. We describe a case due to Staphylococcus lugdunensis, a coagulase-negative staphylococcus identified in 1988, as a first report in Southeast Asia. It was previously misidentified as S. aureus because it is sometimes slide coagulase positive, but always tube coagulase negative, resulting in its delayed recognition as a pathogen. We also reviewed 36 other cases reported in the English literature from 1988 to 1999.

Clinical Picture: Our patient was admitted 3 times over 4 months for unresolved weight loss and fever before the coagulase-negative staphylococcus bacteraemia was eventually considered significant. Treatment and Outcome: He was treated with 4 weeks of high-dose intravenous penicillin and 2 weeks of gentamicin and did not require urgent valve replacement. Conclusion: A positive blood culture of coagulase-negative staphylococcus is not always a contaminant. S. lugdunensis can cause aggressive native valve endocarditis resulting in high mortality, especially without surgical intervention.

Key words: Bacteraemia, Coagulase-negative staphylococcus, Endocarditis, Staphylococcus lugdunensis

* Registrar
Department of Internal Medicine
+ Associate Consultant
Department of Pathology
Singapore General Hospital
** Clinical Director
Communicable Disease Centre
Tan Tock Seng Hospital
*** Consultant Infectious Disease Physician
Gleneagles Medical Centre
++ Senior Consultant Cardiologist
National Heart Centre

Address for Reprints: Dr Hui-Hwang Teong, Department of Internal Medicine, Singapore General Hospital, 1 Hospital Drive, Singapore 169608.
E-mail: zhtteong@mbox3.singnet.com.sg