

SYMPOSIUM 3 – INFECTIOUS DISEASES

FOCUS: EMERGING PATHOGENS

Staphylococcus aureus Bacteraemia: What is the Clinical Significance?

Dr Hj Riamiza Natalie Hj Momin

Brunei Ministry of Health National Hospitals, Health Centres and Clinics

Staphylococcus aureus (*S. aureus*) is a worldwide leading cause of bacteraemias or bloodstream infections. It is a common skin commensal and has the innate propensity to cause invasive infections with metastatic complications in multiple body sites such as endocarditis, septic arthritis, psoas abscesses and spondylodiscitis. Infection may be sourced from both community and healthcare settings.

Susceptibility to methicillin is a common discerning pathogen characteristic, with Methicillin-Resistant *Staphylococcus aureus* (MRSA) bacteraemias prognostically leading to poorer outcomes than Methicillin-Sensitive *Staphylococcus aureus* (MSSA) bacteraemias. Adequacy of treatment in terms of timing, optimal choice and duration of antimicrobial treatment, as well as stratification of those at risk of complicated infection also have bearing on overall prognosis. Available evidence has shown that infectious diseases consultation contributes to improved outcomes. In essence, beta-lactam treatment remains the optimal choice for MSSA bacteraemias, and this should be coupled with adequate source control where relevant. Persistent bacteremia is a risk factor for complicated disease and should trigger an earnest search for a distant focus. MSSA in the urine may herald an associated bacteremia hence, awareness should also be raised of its significance.

The clinical case shared illustrates the sequelae of suboptimally-treated *S. aureus* bacteraemia and tying these to the rationale behind management principles can optimize clinical management of *S. aureus* bacteraemia. Special mention is also made of the importance of adequate infection control measures in the mitigation of nosocomial spread of MRSA, especially with regards to hand hygiene and appropriate transmission based precautions.

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