

Molecular characterization of nosocomial methicillin resistant staphylococci aureus by Rep-PCR.

ABSTRACT

Nosocomial methicillin-resistance *Staphylococcus aureus* (MRSA) poses problem to clinicians and hospital administrators for its management. In the present study isolation, identification molecular characterizations of methicillin-resistance *Staphylococcus aureus* were performed at Hospital Kuala Lumpur, Malaysia during December 2005 to April 2007. Twenty seven MRSA positive samples were identified based on cultural, biochemical and antibiotic sensitivity assay. These were, 51% from blood samples, 33.3% from tracheal aspirate and 11,1% from nasal swab and pus. Molecular method rep-PCR was used to characterize the MRSA positive strains. Results of rep-PCR showed 5 different pattern of bands based on their genomic nature. Thus, rep-PCR was proved to be potential tool to determine genomic differences of nosocomial MRSA in resource limited setting.

Keyword: Antibiogram; Antibiotic resistance; Molecular characterization; MRSA; Rep-Pcr.