

# Karakteristik Isolat Staphylococcus spp. peragi manitol yang resisten metisilin sebagai flora normal pada pasien ICU rumah sakit tersier = Characteristic of methicillin resistant Staphylococcus spp. mannitol fermenters isolates as normal flora in intensive care unit patients of tertiary hospital

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## Abstrak

### [<b>ABSTRAK</b><br>

Staphylococcus spp. peragi manitol merupakan flora normal kulit terbanyak dan sering bersifat multiresisten, serta dapat menjadi salah satu penyebab healthcare associated infection (HAI). Di Indonesia, data mengenai Staphylococcus spp. peragi manitol yang resisten metisilin belum tersedia. Penelitian ini bersifat retrospektif untuk mengetahui pola kepekaan dan karakteristik genotipik (mecA dan tipe SCCmec I-V) flora normal Staphylococcus spp peragi manitol yang diisolasi dari pasien ICU Rumah Sakit Umum Pusat Nasional Cipto Mangunkusumo (RSUPNKM) tahun 2011, 2013 dan 2014. Dari 187 isolat, 15% di antaranya merupakan methicillin resistant Staphylococcus aureus (MRSA) yang sebagian besar resisten terhadap gentamisin (64,3%), klindamisin (50%), golongan fluorokuinolon (64,3-71,4%) dan tetrasiklin (57,1%). Sedangkan 55,6% merupakan Staphylococcus koagulase negatif resisten metisilin (MR-CoNS) yang sebagian besar resisten terhadap gentamisin (55%), fluorokuinolon (62,5-88,5%), eritromisin (91,3%), klindamisin (75%) dan rifampisin (82,7%). Resistensi metisilin pada MRSA hampir semuanya disebabkan oleh gen mecA (96,4%), sedangkan pada MR-CoNS, gen mecA ditemukan pada 76,9% isolat. Tipe SCCmec yang paling banyak ditemukan pada kedua kelompok yaitu SCCmec tipe I. Dapat disimpulkan bahwa sebagian besar Staphylococcus spp. peragi manitol yang merupakan flora normal pasien yang dirawat di ICU RSUPNKM, merupakan pembawa gen mecA. Surveilans berkelanjutan dibutuhkan untuk mengetahui kecenderungan perubahan pola kepekaan dan pencegahan transmisi di fasilitas kesehatan.

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### <b>ABSTRACT</b><br>

Staphylococcus spp. mannitol fermenters are the most abundant skin normal flora. It is frequently resistant to many drugs and could become one of the causes of the healthcare associated infection (HAI). There is no data about Methicillin Resistant Staphylococcus spp. mannitol fermenters in Indonesia yet. In this retrospective study we aim to identify the susceptibility patterns and genotypic characteristics (mecA gene and SCCmec type I-V) of normal flora Staphylococcus spp. mannitol fermenters isolated from Intensive Care Unit patients of Cipto Mangunkusumo Hospital during 2011, 2013 and 2014. This study found that 15% of 187 isolates were methicillin resistant Staphylococcus aureus (MRSA) and mostly resistant to gentamycin (64,3%), clindamycin (50%), fluoroquinolone (64,3-71,4%) and tetracycline (57,1%). While 55,6% of the isolates were methicillin resistant coagulase negative Staphylococcus (MR-CoNS) and mostly resistant to gentamycin (55%), fluoroquinolone (62,5-88,5%), erythromycin (91,3%), clindamycin (75%) and rifampicin (82,7%). Methicillin-resistant on almost MRSA, carried mecA gene (96.4%), while in the MR-CoNS, mecA gene was found in 76.9% of all isolates. The most common SCCmec type found was SCCmec type I. Thus, mecA gene carrier Staphylococcus spp. mannitol fermenters were found as normal

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