Presence of methicillin resistance and heteroresistance among Coagulase Negative Staphylococci (CoNS) isolates obtained from health sciences students at a Public University

ABSTRACT

This study was carried out to investigate the Coagulase Negative Staphylococci (CoNS) nasal carriage and the presence of methicillin resistant Coagulase Negative Staphylococci (MR-CoNS) among health sciences students at Faculty of Medicine and Health Sciences, Universiti Putra Malaysia. A total of 120 isolates of CoNS (62.5%) was isolated from 192 student volunteers. The mecA gene was detected in 15 isolates of CoNS (12.5%). Eight out of the 15 isolates of mecA positive CoNS were resistant to cefoxitin in disc diffusion test whereas the remaining seven isolates of mecA positive CoNS were susceptible to cefoxitin. Analysis of questionnaires showed no significant association between CoNS nasal carriage and the socio-demographic and risk factors except for the genders and history of cold (P < 0.050). Generally, this finding showed a relatively low level of methicillin resistance among CoNS nasal carriage from student volunteers.