CORRELATION BETWEEN A CANDIDA SCORE AND BLOOD CULTURE RESULTS AMONG ICU PATIENTS AT DR CIPTO MANGUNKUSUMO GENERAL HOSPITAL, INDONESIA

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Abstract. Candidemia is associated with high mortality rates. A Candida score has been developed to predict the presence of candida infection in non-neutropenic critically ill patients. We aimed to determine the efficacy of this scoring system for predicting the presence of candidemia among intensive care unit (ICU) patients at Dr Cipto Mangunkusumo General Hospital, Indonesia, in order to guide empiric treatment while awaiting blood culture results. This study was conducted among ICU patients with suspected sepsis during March-October 2015. Blood, urine and sputum were collected for culture among study subjects and a Candida score was calculated for those same subjects. The decision to initiate antifungal therapy during this observational study was at the discretion of the attending physicians. A total of 100 patients were included in the study, of whom 4 had a positive blood culture for *Candida* spp, 3 of the 4 had a Candida score ≥3. Of the 100 study subjects, 4 had a score of 0; 24 had a score of 1; 37 had a score of 2; 29 had a ascore of 3; 6 had a score of 4, and none had a score of 5. Among our study subjects, a Candida score ≥3 for predicting candidemia had a sensitivity of 75%, a specificity of 67% , a positive predictive value of 9% and a negative predicitive value of 98%. With this high negative predicitive value, the Candida score can be utilized to rule out the possibility of candidemia for patients with a Candida score <3; this results in preventing overuse of antifungal medications. Further studies are needed to determine if adopting early use of the Candida score and giving early empiric anti-candida treatment will improve outcomes at the study institution.

Keywords: Candida score, candidemia, antifungal, ICU

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