Role of VRE colonization in septic patients

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Argomento: Altro

Introduction

VRE (vancomycin resistant enterococci) were first described in Europe in the 1980s (1-2). Nowadays they have become endemic in many large hospitals (3-4).

Different studies identified VRE-colonization as high factor risk for infection for VRE (5, 6, 7, 8, 9). Others risk factors for infection with VRE include prolonged hospital length of stay, particularly in the intensive care unit, previous surgical procedures, a high severity of illness or extensive co-morbidities, and substantial previous exposure to broad-spectrum antibiotic therapy (5,6, 9). Solid organ transplant patients, especially liver transplant patients, are a particularly high-risk group of patients for VRE colonization and infection.

Method and statistical analysis

Our study include every patients older than 18 years, admitted to our ICU from 2016 to 2018 with diagnosis of sepsis from abdominal infection. A total of 69 patients were selected. A perianal swab culture was performed at admission and then performed every 72 hours, . VRE colonization at the time of ICU admission was identified in 15 patients (21%). One patient developed VRE colonization in the ICU (1,4%). SAPS II score ratio was higher in VRE-carriers than VRE-free patients (45 vs 39).

In a total of 16 VRE-colonized patients, 10 (62%) developed infection from abdominal site. 4 VRE-colonized patients develops VRE infection in blood (25%).

Septic patients who developed VRE infection had a higher time to discharge rate from ICU than VRE-free septic patients (8,7 days vs 4,9 days). Using log-rank test no statistical difference was found in mortality .

Conclusion

Our data confirmVRE Colonization as an high risk factor for VRE Infection in septic patients. However VRE colonization doesn't seems having a major role in contest of survival of critically ill patients



Table1. log rank test for VRE-free septic patients versus non-VRE septic patients

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