Abstract 3.1

The Probiotic Use and the Duration of Vancomycin Resistant Enterococci Colonization: Prospective Cohort

Sivaporn Kukanok¹, Siriorn Watcharananan¹, Pitak Santanirandr²
¹Department of Medicine, ²Department of Microbiology, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.

Vancomycin-resistant enterococci (VRE) is an emerging bacteria of the past few decades. Although cases were mostly colonization, the infection could be serious and result in a negative impact including a high morbidity, mortality and economic burden for the health care. At our institution, the outbreak of VRE has begun in June 2013. Beside strict infection control protocol, the decolonization of the organism is ideal. Nevertheless, none of the available antimicrobial agent has proven its usefulness for this matter. In the present study, we aimed to determine the efficacy of probiotic for decolonization of the VRE in our patients population. From June 2013 till August 2013, a prospective unblinded randomized study was undertaken among adult (age ≥ 15 years old) with VRE colonization (i.e., positive rectal or perirectal swab culture for VRE). Exclusion criteria were patients with immunocompromised status and prosthetic valve replacement. Cases received name inforan® (Lactobacillus acidophilus and Bifidobacterium bifidum) 4 capsules three times a day for 3 weeks. Rectal swab cultures were performed weekly for 4 weeks. All patients were followed for 3 months. During the study period 41 were enrolled. Patients’ median age was 70.5 (range: 15-97) years and 45.24% were male. Major underlying diseases were cancer 16 (33%), diabetes mellitus 6 (12%), cerebral infarction 6 (12%) were admitted at the respiratory step down/intensive care unit. Probiotic were given to 16/41 patients. During the follow up period, 3 patients were lost to follow-up, and 11 (26.8%) died from non-VRE related causes. At week 1, 2, 3 and 4, the VRE negative rate were 13.3%, 25%, 46.2% and 30% for probiotics group and 35.3%, 46.2%, 70% and 6 (54.6%) for the controls, respectively. Oral probiotic were not efficacious in reducing the short term carriage of VRE.