

## Rotavirus Vaccines

Dear Editor,

I read the compilation on Rotaviruses by Kocabaş and Dayar (1) with great interest. Rotavirus infections are responsible for the mortality of 453.000 children aged under five. Rotavirus infections cause 25 million doctor visits and two million hospitalizations. 18.8% of diarrheas in Turkey are rotavirus gastroenteritis (2).

There are two live rotavirus vaccines in Turkey. Five-valent Rotateq® prevents 95% of hospitalizations. It is recommended orally in the 2-4-6 months. The mono-valent Rotarix® prevents 85% of hospitalizations. It is administered orally in the 2<sup>th</sup> and 4<sup>th</sup> month (1).

The rotavirus vaccines in the 2-4-6 months should be administered in the same months as the live vaccines such as BCG and oral polio vaccine (OPV) in the routine immunization program. The fact that the vaccine has to be paid for and obtained by the patient, that it has to be made available in the pharmacies and drug warehouses, commercial concerns, the financial situation of the family in that particular month all have an impact over the day of administration of the vaccine. The BCG vaccine is administered in community health centers at a certain day of the week.. All these reasons require the time interval between rotavirus vaccines and other vaccines to be revised.

Rotavirus vaccines can be given simultaneously with the other nasal or parenteral vaccines. The American Advisory Committee on Immunization (ACIP) points out that there is no need a specific time interval with the OPV vaccine. The Institute of European Pediatric Gastroenterology Hepatology and Nutrition (ESPGHAN) and European Society of Pediatric Infections (ESPID) do not recommend rotavirus vaccine to be administered simultaneously with the OPV (1).

The Public Health Agency of England has recommended the administration of the two live vaccines simultaneously or at least with four-week interval. In the new recommendation the agency made in February 2014, they announced that BCG and rotavirus vaccines could be administered at some time before or apart from one another (3).

Australian National Centre for Immunization Research and Surveillance and Public Health Agency of Canada announced that BCG and rotavirus vaccines could be administered at the same time or at some time before or apart from one another (4, 5).

In conclusion, the BCG and rotavirus live vaccines administered through different routes can be shot without a priority and regardless of the time interval. It is crucially important and valuable to emphasize it in order not to miss the golden vaccine opportunities.

Best regards,

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## Comparison of Healthcare-related Infection Rates Based on the National Nosocomial Infections Surveillance System of Turkey Diagnostic Criteria Reported in 2010 and Centers for Disease Control and Prevention Reported in 2014 in A Tertiary Hospital

Dear Editor,

I read the article titled "Comparison of Healthcare-related Infection Rates Based on the National Nosocomial Infections Surveillance System of Turkey Diagnostic Criteria Reported in 2010 and Centers for Disease Control and Prevention Reported in 2014 in a Tertiary Hospital" by Oruç et al. (1) with great interest. Healthcare-related infections are the major problems responsible for the frequently encountered morbidity, mortality and increased cost in the neonatal intensive care units. The definitions used for the surveillance of healthcare-related infections have been developed by "Centers for Disease Control and Prevention (CDC)" and are implemented in the surveillance studies in hospitals. In the study by Oruç et al. (1), the effects of implementation of the CDC 2014 Healthcare-Related Infection Diagnostic Criteria and the previous Diagnostic Criteria for Nosocomial Infections Surveillance in Turkey and the 2009 CDC Intravascular Catheter-Related Bloodstream Infection Diagnosis Guide on the hospital infection rate values were

compared. In a study carried out in a unit where premature infants were monitored, while the 2014 healthcare-associated infection rate according to the guidelines Turkish Nosocomial Infections Surveillance was 21.1%, it was found that it was 11.54% according to the January 2014 Diagnostic Criteria for Disease Prevention and Control Center. In the previous studies, the neonatal intensive care unit healthcare-associated infection rates varied between 5% and 32% (2-5). It was reported that infection frequency in premature babies was 21% (3). In another study, healthcare-related infection frequency in the premature babies with a birth weight of  $\leq 1500$  g was 15.3% and in babies with a birth weight of  $>1500$  g, 15.3% (6).

The healthcare-related infection density according to the guidelines Turkish Nosocomial Infections Surveillance in the study was 18.3 in 1000 patient days, it was found that it was 10,01 according to the January 2014 Diagnostic Criteria; and a difference was found due to the lack of clinic sepsis diagnosis in the CDC criteria. In a study carried out in a neonatal intensive care unit, it was found that the healthcare-related infection density was 4.2 in 1000 patient days (7). I am of the opinion that the reason why the infection density in the study by Oruç et al. (1) was higher was related to the fact that the premature babies were included into the study.

It was reported in the study by Oruç et al. (1), the central catheter-related bloodstream infections (CCRBI) and umbilical catheter-related bloodstream infections (UCRBI) according to the January 2014 Diagnostic Criteria for Disease Prevention and Control Center were higher according to the Guidelines of Turkish Nosocomial Infections Surveillance. While 9.97 CCRBI in 1000 patient days was found according to the Guidelines of Turkish Nosocomial Infections Surveillance, 12.46 CCRBI was found in 1000 catheter days according to the 2014 CDC criteria. The reason why it was found that the rate of CCRBI was higher according to the new definition was that the growth of pathogen microorganism in a single blood culture in patients with central or umbilical catheter for more than 2 days is sufficient to make the diagnosis of CCRBI according to the CDC 2014 laboratory-proven bloodstream infection criteria. In the study by Yuan et al. (7), it was reported that the CCRBI rate in the neonatal intensive care unit was 5.4 in 1000 catheter days. The CCRBI rate in the study by Oruç et al. (1) is higher in comparison to other studies.

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## Comparison of Healthcare-related Infection Rates Based on the National Nosocomial Infections Surveillance System of Turkey Diagnostic Criteria Reported in 2010 and Centers for Disease Control and Prevention Reported in 2014 in A Tertiary Hospital

Dear Editor,

I read the article titled Comparison of the healthcare-related infections rates according the criteria of National Nosocomial Infections Surveillance System of Turkey reported in 2010 and Centers for Disease Control and Prevention reported in 2014 in a tertiary hospital by Oruç et al. (1) with great interest. In the article where 2010 and 2014 criteria of the Centers for Disease Control and Prevention were compared, it was reported that the healthcare-related infections decreased since especially the sepsis diagnosis available in the 2010 was not used and the catheter-related and umbilical catheter-related blood circulation infections increased (2-5). However, statistically speaking, only one case with laboratory proven bloodstream infection and one with umbilical catheter-related blood circulation infection were added. Due to the reasons such as the fact that the study was carried out Premature Clinic, the difficulties experienced in obtaining blood samples from these patients, and