

Nosocomial Rotavirus Infection: Epidemiology, Clinical Manifestations, and Effectiveness of Infection Control Measures in Pediatric Ward in Bamrasnaradura Infectious Diseases Institute, Thailand

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ABSTRACT

Rotavirus (RV) is the major causative agent of gastroenteritis in young children, and nosocomial rotavirus (NRV) transmission has been reported. However, limited data are available in Thailand. The routine detection of RV antigen in the stool has been performed in hospitalized children with diarrhea concomitant with vomiting in Bamrasnaradura Infectious Diseases Institute, Thailand, since January 2004. We found the incidence of RV infection/total hospitalized diarrhea cases was 24.6 percent. The bundle of RV infection control measures have been strengthened since October 2006. We then analyzed the incidence of NRV diarrhea (defined as diarrhea occurred after 72 hours of hospitalization or within 48 hours after discharge in patient with positive RV antigen in the stool), comparing between pre-RV intervention period (October 2005 to September 2006) and RV intervention period (October 2006 to September 2007). Significant decreased trend of the proportion of NRV/RV was observed as 5.7 percent (9 of 156 patients) and 0.7 percent (1 of 137 patients) in pre-RV and RV intervention period, respectively (P value = 0.02). Of these 10 NRV patients, the mean age was about 17.1 months old, and most patients occurred around day 5 of hospitalization. All patients had severe vomiting, and 60 percent of patients had high grade fever. All patients had good recovery from the infection. RV infection could be one of the most important nosocomial pathogens, especially during RV season. Pediatricians should be aware of making an early diagnosis, and apply special infection control measures to prevent NRV transmission. (*J Infect Dis Antimicrob Agents* 2008;25:33-41.)