ABSTRACT

Genotypic Analysis of Rotavirus in Children with Acute Diarrhea in Bandar Lampung

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Background: Diarrhea is common major of morbidity and mortality in children <5 years old. It cause 2 millions (about 20%) mortality in the world. In Indonesia, percentage mortality of diarrhea is 31.4% in infant and 25.2% in children < 5 years old. this research aim to analize Rotavirus genotype in children with acute diarrhea in Bandar Lampung. Material and Method: This is an analytic-cross sectional design study. Samples were collected from 2 Puskesmas and two hospitals in Bandar lampung from September-Desember 2016. Rotavirus was identified by immunochromatography, PCR, and sequencing in Institute of Tropical Disease, Universitas Airlangga, Surabaya. Secondary data was collected by interview. Result: There are 31 samples (80%) are positive Rotavirus infection. Twenty eight positive samples (72%) are mild severity of diarrhea. All of the positive samples (100%) give negative result in second round PCR (genotyping). 21 samples was evaluated by sequencing and has gen G3 (VP7) that was homolog with G3 Equine-like strain from Australia and Japan. Conclusions: There was colleration between genotype and diarrhea severity in children <5 years old.

Key words: Rotavirus, genotype, G3 Equine-like, severity diarrhea, Bandar Lampung