Thesis Title Rotavirus infection in infants at Ramathibodi Hospital, Bangkok.

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ABSTRACT

Rotavirus has been shown to be an important cause of infantile diarrhea in both developed and developing countries.

The objectives of this prospective study are (a) To study the infection rate of rotavirus diarrhea in infants, (b) To demonstrate the electropherotype of rotavirus and (c) To detect the rotavirus antibody in healthy babies.

This study was performed at Ramathibodi Hospital, Bangkok during September 1, 1987 to February 29, 1988 by recording the history of illness and collecting stools of diarrheal infants. Peripheral blood of healthy babies and cord blood of newborns were collected to detect rotavirus antibody.

The finding revealed that

a. Rotavirus was found about 29.78% among total diarrheal infants by ELISA and / or PAGE methods. The high infection rate was between December to

January. The highest incidence was in 10-12 months age group. Both sexes were equally affected. Clinical findings in rotavirus diarrhea were watery diarrhea (85.07%), respiratory symptoms (64.18%) and vomiting (59.7%). For respiratory symptoms such as rhinorrhea, cough, common cold might be the coincidence of rotavirus diarrhea.

b. Nine different electropherotypes were detected and the most predominated type was electropherotype D. Short forms (56.9%) were found more than long forms (43.1%).

c. The presence of rotavirus antibody was found 84.77% of all sera with the most titres of 1:200. The rotavirus antibody was not statistically significant difference among sex and age group.

Recommendation for future studies are (a) Study of rotavirus electropherotypes at the the community level,(b) Comparison about severity of rotavirus diarrhea between long and short electropherotypes, (c) Correlation about serum rotavirus antibody and protection against rotavirus infection, and (d) Rotavirus vaccine trial.