Correlation between electrophoretypes and genotypes of rotavirus strains in Cotonou, Benin

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In developing countries, mainly those which have not introduced rotavirus vaccine into their Expanded Program on Immunization, rotavirus diarrhea is the leading cause of mortality and morbidity in children under 05 years of age.

In order to improve the knowledge on the molecular studies of rotavirus strains circulating in Benin in the pre-vaccination period, 150 positive stool specimens with known polyacrylamide gel electrophoresis profiles were selected. RNA of these samples were extract by the Phenol / Chloroform method and then were subject to RT-PCR.

Children in the age group of 7 to 12 months were the most represented (55,3%) followed by children under 6 months (27,3%). G1P8 (34,1%) is the predominant genotypic combination and is associated with the long profile. It is followed by G2P4 (22%), associated with the short profile. Mixed genotypes were obtained as well as unusual, emerging G12P8 (12%), G10P6 (2%), G3P6 (10%) and non-typeable genotypes.

Key words: Diarrhea, rotavirus, RT-PCR, genotypes, electrophoresis.

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