

Rota Virus Genotypes and the Clinical Severity of Diarrhoea Among Children Under 5 Years of Age

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Background

Diarrhoeal disease still remains one of the common causes of morbidity and mortality in children under 5 years of age. It is caused notably by the different serotypes of rotavirus. **Objectives:** To ascertain the prevalence and risk factors for rotavirus diarrhoea in children under 5 years of age seen at Federal Medical Centre, Asaba, and to determine the different serotypes and their relationship with diarrhoea severity.

Subjects and Methods

A hospital-based cross-sectional study in which all children under 5 years of age, with diarrhoea had their stool samples tested for rotavirus antigen with enzyme immunoassay. Significant values of variables were determined using *t*-tests and Chi-square tests as appropriate.

Results

One hundred and thirty-two children were studied: 52.3% were males and 46.7% were females. Children 1–11 months of age constitute 49.2%, whereas those 12–59 months were 50.8%. Only 49 (37.1%) children were ELISA positive for rotavirus and of this number, 31 (63.3%) were within 1–11 months of age, $P = 0.013$. The three most common rotavirus genotypes were G3P[6] in 24.5%, G1P[6] in 12.2% and G12P[8] in 10.2% of the samples, respectively. Duration of vomiting was more prolonged with G3P[6] infection, $P = 0.029$, whereas dehydration and the overall severity of the diarrhoea were more with G12P[8] infection, $P = 0.026$ and 0.010 , respectively.

Conclusion

The emerging G12 rotavirus genotype was isolated in Asaba.