Coinfection of WU Polyomavirus and Norovirus Genogroup II in the Stool of Children with Acute Gastroenteritis in Taiwan

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Background/Objective

The human WU polyomavirus (WUPyV) has been recently detected in various sample types including stool indicating pathogenicity in the gastrointestinal tract. The aim of the study was to investigate the prevalence of WUPyV and to examine coinfection of WUPyV and human Norovirus (NV) in fecal samples of children with acute gastroenteritis in Taiwan.

Method

Faeces from children with acute gastroenteritis were screened for the presence of the WUPyV by PCR. In addition, stool samples of children with positive WUPyV were analysed for the presence of the NV by real-time RT-qPCR.

Result

WUPyV was detected in 4 (3.6%) of 110 children with acute gastroenteritis and as coinfection with NV genogroup II in 1 (25%) child.

Conclusion

To the best of our knowledge, this is the first report describing WUPvY and NV coinfections among children with acute gastroenteritis. Data from this study showing the existence of WUPyVs in fecal samples indicated that the prevalence of WUPyVs among children patients might be due to a possible fecal-oral route of transmission of WUPyVs.