

Abstract

The causes of gastroenteritis include bacteria, parasites, viruses et al. In the industrial countries, viruses became to be the major causes of these diseases. In the Europe and the United States, about 60% to 80% gastroenteritis cases have been estimated to be caused by viruses. The most infectious population of viral gastroenteritis is children especially under 10 years old. The clinical symptoms of these children are vomiting, heavily watery diarrhea (more than 10 times each day), dehydration, seizure. And few of these cases will dead because of dehydration, especially in the third countries.

In our research, we collected fecal specimens from children under 10 years old with acute gastroenteritis. During April 2004 to November 2005, there were 820 and 801 specimens came from hospitals. The samples were examined genes of Rotavirus, Norovirus and Astrovirus by RT-PCR. And the positive rate of each virus was 16.41%, 7.03% and 0.54%. Then, the Rotavirus test positive samples were genotyped for G genogroups by sequencing VP7. The surveillance of G genotypes were G1(11.34%, 22.3%), G2(34.02%, 27.03%), G3(24.74%, 20.27%), G4(0, 0.68%) and G9(24.74%, 25%). However, we also found that Norovirus is the major cause of outbreaks in Taiwan in these two years.

Keyword: Acute gastroenteritis, Rotavirus, Norovirus, Astrovirus