

Abstract:

Human astroviruses (HAstV) have been commonly identified worldwide as important aetiological agents of acute gastroenteritis in all age groups including the young, elderly and immunocompromised. However, limited data exist on the prevalence of this important pathogen in Kenya. The aim of this study was therefore to determine the prevalence of astrovirus (AstV) infection in Kenyan children younger than 10 years of age with diarrhoea. During the period February 1999 to September 2005, stool samples were collected from 476 children attending clinics in Nairobi (and its environs) and the Maua Methodist Hospital, Meru North, Kenya. The faecal specimens were tested by a commercial enzyme immunoassay kit for HAstV. AstV prevalence rates were found to be 6.3%. There was significantly high prevalence of AstV infection in children ≤ 5 years [5.3% (25/476)] than those > 5 years [0.2% (1/476)] ($p < 0.01$). Also, we showed a significantly high prevalence of AstV infection in children of ≤ 5 years [5.8% (20/341)] in Nairobi (urban setting) as compared with those of similar age in Maua (a rural setting) [3.7% (5/135)] ($p < 0.01$). This study indicates that HAstV is an important pathogen associated with diarrhoea in young Kenyan children.