

## DISEASES BY ROTAVIRUS AND OTHER ENTEROVIRUS

### Enterovirus001- Detection of rotavirus group C in fecal samples from children less than three years hospitalized for gastroenteritis in Belém, Pará, Brazil.

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**Introduction:** Acute gastroenteritis is a major cause of morbidity and mortality worldwide, particularly in infants and young children. Rotavirus (RVs) is recognized as the most important single agent of acute severe gastroenteritis in children less than 5 years of age. It is estimated that RVs are responsible for two million hospitalizations and 527,000 deaths per year worldwide. The RVs are classified into seven distinct serological groups (A to G). Group A RVs is the most prevalent, however Group C (RVs-C), which was originally detected in pigs, has gained importance as cause of self-limiting episodes of gastroenteritis, mainly in children. *Rotavirus* genus belongs to the *Reoviridae* family and the viral genome possesses 11 segments of double-stranded RNA (dsRNA). This study aims to identify RVs-C in children less than three years old hospitalized for acute gastroenteritis (AGE) in Belém, Pará, Brazil. **Material and Methods:** From May 2008 to April 2009, an intensive surveillance for AGE was carried in a pediatric hospital from Belém. Fecal samples were collected from children with AGE and sent to Evandro Chagas Institute for testing. The samples were initially tested for the presence of RVs-A, astrovirus and norovirus using serological commercial tests all of which yielding with negative results. RNA was further extracted from fecal suspension by silica method and the being subsequently reverse-transcribed and amplified by polymerase chain reaction (PCR) using the pair of primers G8S and G8A specific for VP7 gene which amplifies a 1063bp fragment. Positive (prototype Cowden) and negative control (water) were used in all tests. **Results:** Of the 225 samples tested, seven (3.1%) were positive for RV-C VP7 gene. **Conclusion:** The prevalence rate of RV-C in our study (3.1%) was lower than that (13%) reported for an earlier (1982-1986) longitudinal study among children living in the outskirts of Belém. Although occurring at low rates, RV-C appears to have a role as a cause of AGE among children in Belém, Brazil; these data warrant further studies including molecular characterization through sequencing analyses. **Keywords:** Group C Rotavirus, RT-PCR, hospitalized children, gastroenteritis. **Financial Supports:** IEC/SVS/MS **E-mail:** patricialobo@iec.pa.gov.br

### Enterovirus002- "Safety Monitoring Oral Vaccine Against Rotavirus Used and Marketed in Brazil, in August 2008 to January 2010 - Bahia."

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**Introduction:** The World Health Organization recommends vaccination against rotavirus in all countries as a way to reduce fatal and severe disease caused by this virus. Safety monitoring has become a priority because the first licensed vaccine was withdrawn after identifying an association with intussusception occurring case in every 5,000 to 10,000 children vaccinated. **Objective:** Monitor the risk of intussusception following administration of oral vaccine against rotavirus in children aged 6 weeks to 11 months and 29 days. **Method:** We used the case-control design to evaluate the possible association between the vaccine and the disease in children under one year old in Brazil. For each case, we selected four healthy controls matched for age (30 days from the date of birth of the case), identified in the same neighborhood of residence of the case and included after informed consent of (a) responsible for the child. The vaccination history of cases was obtained by immunization booklet or card mirror in Basic Health Units **Results:** A total of 141 cases identified through active surveillance and retrospective searching in three referral hospitals for pediatric surgery in the state of Bahia, 131 were included in the study, 106/131 children were aged 7 months to complete at the time of intussusception, the average age