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## Molecular detection of acute virus infection in children hospitalized with diarrhea in North India during 2014-2016

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**Background & Aim:** These (*rotavirus*, *astrovirus* and *adenovirus*) viruses are responsible for diarrhea in children, basically those have near about <5 years old. Detection of the entire virus is crucially important to the development of the effective cure. This study aimed to determine the prevalence of these common viruses in children <5 years old presented with diarrhea to the from Lala Lajpat Rai Memorial Medical College (LLRM) Centre (Meerut) North India, India.

**Methods:** Total 312 fecal samples were collected from diarrheal children for the duration of 3 years: In year 2014 (n=118), 2015 (n=128) and 2016 (n=66), <5 years of age who presented with acute diarrhea at the Lala Lajpat Rai Memorial Medical College (LLRM) Centre (Meerut) North India, India. All samples were first detected by EIA/RT-PCR for rotaviruses, adenovirus and astrovirus.

**Results:** In 312 samples from children with acute diarrhea, viral agent was found, rotavirus A was the most frequent virus identified (57 cases; 18.2%), followed by astrovirus in 28 cases (8.9%), adenovirus in 21 cases (6.7%). Mixed infections were found in 14 cases, all of which presented with acute diarrhea (14/312; 4.48%).

**Conclusion:** These viruses are a major cause of diarrhea in children <5 years old in North India. Rotavirus A is the most common etiological agent, followed by astrovirus. This surveillance is important to vaccine development of the entire population.

## **Biography**

Ali Ilter Akdag is pursuing his PhD from Jamia Hamdard, India. His research area is molecular virology and vaccinology. He works on acute gastroenteritis viruses like rotavirus, adenovirus, astrovirus, norovirus and sapovirus. He has completed MSc (Zoology) from Osmania University (2013-2015) in Hyderabad, India. He has actively participated in conferences national and international.

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