

# **Investigation of the frequency of Rotavirus infection in children $\geq 5$ years in the period refer to hospitals with transudative diarrhea in Ardabil city of 2019-2020**

## **Abstract**

**Background:** Despite the global introduction of vaccinations for rotavirus over a decade ago, rotavirus infections still result in >200,000 deaths annually, mostly in low-income countries. Therefore, it seems necessary to examine children's diarrhea samples to detect the spread of rotavirus.

**Aim:** Studying the frequency of rotavirus infection in children under 5 years of age with transudative diarrhea referred to Bu-Ali Hospital in Ardabil city in the period of 2019-2020

**Materials and methods:** We examined the children who were referred to the hospital due to diarrhea and had the inclusion criteria in the period of 12 months. Information about age, sex, duration of hospitalization, reasons for discharge were collected. Then the samples were tested for rotavirus group A antigen by enzyme immunoassay (EIA) method.

**Results:** In this study, 116 samples were collected. 45.7% of these cases were positive. Most of the children included in the study were in the age range of zero to one year. The highest percentage of infection in terms of gender was related to boys, but no significant relationship between rotavirus infection and gender was observed. There was no relationship between rotavirus infection and the average days of hospitalization.

**Conclusion:** The results of the present study showed a rather high prevalence of rotavirus among the patients. Detailed and additional examinations in terms of rotavirus can help the health system of countries to reduce the economic and social burden.

**Key words:** Gastroenteritis, Transudative diarrhea, Rotavirus