

Viral Gastroenteritis

Disease of infants & children.
Self limiting.
Watery diarrhea (no blood),
vomiting & abdominal pain.

Viral Etiology

Rota viruses (family: **reoviridae**) → **most common**.

Enteric adenoviruses (family: **adenoviridae**).

Astroviruses (family: **astroviridae**).

Norovirus (family: **caliciviridae**).

Sapovirus (family: **caliciviridae**).

Reoviridae

Unenveloped, ds-RNA.

Infect **epithelial cells in the small intestine**.

They replicate at the tips of the villi (mature cells), responsible for absorption → watery diarrhea.

They **do not replicate in the crypt**.

IP, 1-3 days.

Symptoms: watery **diarrhea (No blood)**, V & N, abdominal cramping & pain, **fever**.

Duration: 2-7 days.

Rota vaccine

2 Types of vaccine:

Rota Taq & Rotarix

Live attenuated, oral vaccine. And The vaccine only for ROTA virus.

Administered in three doses.

Lab diagnosis

By detection of these viruses in **stool**, using EIA.

Astroviridae (star shape) → **Unenveloped, ss-RNA.**

Adenoviruses → **Unenveloped, ds-DNA.**

Noroviruses & sapoviruses → **Unenveloped, ss-RNA**

Norovirus affects **all age groups**, often occurs in **closed or semi-closed** communities, such as hospitals, dormitories, prisons.