

# Roseola

Roseola is a common exanthem in young children that presents with a high fever followed by a rash. It is usually caused by Human Herpesvirus 6 (HHV-6), which is an enveloped linear double-stranded DNA virus. Children will have 3-5 days of a high fever, which may exceed 40C or 104F, causing some children to develop febrile seizures. Following this, a diffuse macular rash starts on the trunk and spreads to the face and extremities.



**PLAY PICMONIC** 

#### **Exanthem**

X-rash

An exanthem is a widespread rash usually occurring in children and can be caused by toxins or drugs, microorganisms, or can result from autoimmune disease

#### Herpesvirus 6

Harp-virus with (6) Sax

This virus is in the herpesviridae family and is HHV-6.

#### **Enveloped**

Envelope

Roseola is an enveloped virus. Viral envelopes are outer membranes that cover their protein capsids that help to enter host cells.

## **Double Stranded DNA**

DNA Double-helix

Roseola is a DNA virus, meaning its genetic code consists of deoxyribonucleic acid as opposed to ribonucleic acid. Like all DNA viruses except parvovirus, HHV 6 has double stranded DNA genome.

#### Linear

Line

Roseola has DNA in a linear arrangement as opposed to a circular formation.

# Signs and Symptoms

# **High Fevers Can Lead to Seizures**

Fever-beaver Running into Caesar

Roseola usually begins with a fever that exceeds 40C or 104F and lasts for 3-5 days. In some children this can lead to febrile seizures.

### Diffuse Macular Rash After Fever

Child with Rash Behind Fever-beaver

Roseola typically starts with several days of a high fever and is then followed by the development of a diffuse macular rash that begins on the trunk. This rash may spare the face or appear on the face following the development of the rash on the trunk.