

Viral exanthems of childhood caused by DNA viruses:

1. Erythema infectiosum (fifth disease)

Caused by parvovirus B19 which is a single stranded DNA non-enveloped virus

Transmitted by respiratory secretions

Characterized by fever and slapped cheek rash

Diagnosis is by serology (IgM anti-parvovirus B19) or by real-time PCR

Treatment is supportive, the disease is self-limited

No human vaccine is currently available

2. Roseola infantum (exanthema subitum or sixth disease)

Caused by primary human herpes viruses 6 or 7 infection which are double stranded

DNA enveloped viruses that establish latency in various cell types without significantly known consequences of reactivation

Transmitted by respiratory secretions

Characterized by high-grade fever and pink rose-like rash

Diagnosis is by real-time PCR

Treatment is supportive, the disease is self-limited

No human vaccine is currently available

3. Chickenpox (varicella)

Caused by primary varicella zoster virus (VZV) infection which is a double stranded DNA enveloped virus that establish latency in dorsal root ganglia

Transmitted by respiratory secretions

Characterized by fever and very itchy rash

Diagnosis is by serology (IgM anti-VZV) or by real-time PCR

Treatment is supportive, the disease is self-limited with few complications (pneumonia, meningitis)

Live attenuated human vaccine is currently available

Good luck!