

CHICKEN POX

Caused by varicella-zoster virus (VZV)

>90% of cases occur in children younger than 10 years

Increased morbidity in adults, immunocompromised

No variance with sex or race

More adult cases in countries with tropical or semitropical climate

Incubation period 10-21 days

Infectious for 1-2 days prior to the development of rash and for 4-5 days afterwards (when last crop of vesicles is crusted)

Transmitted by inhalation of airborne respiratory droplets from an infected host

May also occur through direct contact with the vesicles

Reactivation of VZV results in the clinically distinct syndrome of herpes zoster (shingles)

In children, no prodrome - illness starts with rash

In adults prodrome of nausea, myalgia, anorexia, and headache

Small, erythematous macules appear on scalp, face, trunk, and proximal limbs, with rapid sequential progression over 12-14 hours to papules, clear vesicles, and pustules, with subsequent central umbilication and crust formation.

Classically "dewdrop on a rose petal"

Vesicles may appear on palms, soles and mucous membranes

Intense pruritus commonly accompanies the vesicular stage of the rash

Active and healing lesions present in all affected areas

In adults - prolonged fever, more widespread rash and increased complications, commonest varicella pneumonia

Immunocompromised - high risk of disseminated disease

This may include, pneumonia, encephalitis, hepatitis, myocarditis, glomerulonephritis, haemorrhagic complications

Secondary bacterial infection is commoner and more severe

Treatment

In healthy children - supportive

Some recommend oral acyclovir for children with chronic atopic dermatitis, asthma, nephrotic syndrome because of increased risk of complications

Adults - acyclovir reduces duration and severity of symptoms

Immunocompromised - IV acyclovir

Exposed high risk pts including infants born to mothers with chickenpox 5/7 pre or 2/7 post delivery - VZ immunoglobulin modifies course but does not prevent. Best effects when given ASAP

Live attenuated vaccine available - reported cases of disease in immunocompromised

Guillane-Barre, Reyes syndrome, acute cerebellar ataxia all reported post VZV infection