



## Clinical Presentation



- **Prodrome:** fever, malaise, anorexia, headache
- Rash is widespread, pruritic rash, erythematous macules which progress to blisters that crust over
- Rash is not uniform, lesions at **different stages of healing**, centripetal distribution
- Most common complication is secondary bacterial infections from **group A streptococcus, Staphylococcus aureus**
- Reactivation of latent infection decades later resulting in **Herpes Zoster (Shingles)**. Rare in healthy children, often **history of chickenpox or vaccine**, rapid recovery.

## Pathogenesis

- **Transmission:** respiratory or oral secretions
- Stays **airborne** for many hours, may be acquired from being in the same room as an infected person
- 1<sup>st</sup> viremia (prodrome symptoms), 2<sup>nd</sup> viremia (widespread rash)
- **Breakthrough varicella:** mild form (<50 lesions), most often after only single dose of vaccine
- Replicates in lymphoid tissue. Virus remains latent for life in a **dorsal root ganglion**
- Virus can **reactivate** at any point, especially if the person becomes **immunosuppressed**

## Management

- Most sensitive test: **PCR** from skin lesions



Acyclovir (ACV) not recommended unless risk factors present

Risk stratify...

Age >12, steroids, chronic skin/pulmonary disease, or long term salicylates

Transplant recipient, on chemotherapy, or biologic response modifiers

≥1 of above  
**PO ACV**

≥1 of above  
**IV ACV**

### When can they go back to school?

- ✓ Back to school/daycare if feels well
- ✓ **Immunocompromised** classmates should seek post exposure prophylaxis

## Prevention

- ✓ Prevention through **vaccination**
  - Live Attenuated Vaccine given SubQ in **2 doses** (12 months then at 18 months or 4 years)
  - **Contraindicated** if: previous anaphylactic reaction, pregnancy, immunosuppressive therapy, leukemia/lymphoma

### Who gets a post exposure prophylaxis (VZIG)?

1. Immunosuppressed patients (VZIG but may use vaccine in lower risk cases).
2. Premature babies (<28 weeks).
3. Newborns exposed to varicella (5 day pre-delivery to 2 day post-delivery).
4. Pregnant women without evidence of immunity to varicella.

\* Note on neonatal varicella: consult infectious disease. Management is complicated.

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