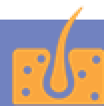
ECZEMA HERPETICUM



source: dermnetnz.org

PATHOPHYSIOLOGY

Pathogen:	**Herpes Simplex Virus** (**HSV**) 1 or 2
Cause:	Primary (most common) or recurrent infection
Onset:	2-12 days after exposure
Ages:	All ages, most common in infants and children with **atopic dermatitis** (**AD**)
Risk Factors:	AD patients susceptible due to an impaired skin barrier, inflammation and immune dysregulation [*affects 3-6% of patients with AD*]

PRESENTATION

- Onset: cluster of itchy, painful blisters
- **Morphology**: monomorphic papulovesicles +/- "punched out" erosions overlying eczema. Coalescent, crusted, and overlying an erythematous base
- **Location**: commonly on **head**, **neck**, and **upper torso**

Systemic Symptoms:
- Fever, malaise or lymphadenopathy

DIAGNOSIS

- Clinical diagnosis with high index of suspicion in patient with known AD and new onset monomorphic vesicular rash

INVESTIGATIONS (*for definitive diagnosis*)
- Polymerase chain reaction (PCR) *Gold Standard*
- Alternatives: Direct fluorescent antibody (DFA) testing, Viral culture, Tzanck smear

- Consider blood culture if patient systemically unwell or signs of sepsis

Differential Diagnosis: Impetigo, contact dermatitis, varicella or herpes zoster, eczema molluscatum, eczema coxsackium, monkeypox, hand-foot-and-mouth disease, dermatitis herpetiformis

COURSE

Initial Symptoms (**Day 0-3**)
- fever, malaise, irritability, and painful skin lesions

Progression (**Day 3-7**)
- rapid spread and dissemination

Peak Symptoms (**Week 1-2**)
- pain, discomfort, and extensive skin involvement
- period when complications are most likely to arise

Resolution (**Week 2-6**)

COMPLICATIONS

DERMATOLOGIC EMERGENCY

ACUTE
- Eczema exacerbation
- Secondary bacterial superinfection
- **Ophthalmologic**: Keratitis or Keratoconjunctivitis
- **Neurologic**: Bell's palsy, meningitis, encephalitis
- **Systemic dissemination**:
- viremia, bacteremia, fungemia → multi-organ failure

CHRONIC
- Scarring

- Recurrence in up to 50% of AD patients within first year from initial infection

MANAGEMENT

- If clinical suspicion high or known eczema herpeticum → start **acyclovir** (IV or PO depending on clinical context)
- If 2° bacterial infection → start antibiotics (cover *s. aureus* and *group A strep*.)
- If involvement of ophthalmologic branch of trigeminal nerve → consult ***ophthalmology***
- If severe and/or recurrent disease → consider prophylactic antiviral therapy
- Optimize AD management (bland emollients, hold topical steroids or calcineurin inhibitor until 48-72h after antiviral)

NOTE: Dosing and treatment is variable based on intravenous vs oral, immune status, and extracutaneous involvement

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