

ATOPIC DERMATITIS (AD)





Atopic dermatitis (also known as eczema) is a common chronic inflammatory skin condition that begins during infancy or early childhood, characterized by dry. pruritic, erythematous papules and plaques

Pattern of AD



Infants > 4 yo < 4 yo

Eczema **Atopic Triad** Allergic **Rhinitis**

CLINICAL FEATURES

Diagnostic criteria: itchy skin (essential) $+ \ge 3$ of the following:

- 1. Hx of relapsing **OR** current visible flexural dermatitis (> 4 yo) or dermatitis on cheeks, forehead, outer limbs (< 4 yo) See pattern of AD above
- 2. Personal Hx of asthma or allergic rhinitis(or positive FHx of firstdegree relative in children < 4 yo)
- 3. Xerosis within past year
- 4. Onset < 2 years

DIFFERENTIAL DIAGNOSIS

- Seborrheic / contact / nummular dermatitis
- Infestations scabies
- Infection tinea, impetigo
- Autoimmune lupus, dermatomyositis
- Primary immunodeficiencies (rare)
- Mycosis fungoides (in adolescents)

PATHOPHYSIOLOGY

Epidermal Barrier Dysfunction Genetic Disposition Immune Dysregulation

QUALITY OF LIFE

- Psychosocial distress (loss) of sleep, intense pruritis, social embarrassment)
- † risk of ADHD, depression, and anxiety

COMPLICATIONS

IMPETIGO ----->

- S. aureus infection
- Yellow overlying "honey-crusting"
- Topical/systemic antibiotics

ECZEMA HERPETICUM----→

- HSV infection
- Monomorphic, punched out erosions
- Immediate antiviral therapy



ECZEMA COXSACKIUM

Coxsackie virus infection

MANAGEMENT

NON-PHARMALOGICAL (All patients)

- Patient education (www.eczemahelp.ca)
- Eliminate exacerbating factors (e.g. scented products, dry air)
- Skin hydration (e.g. petroleum jelly, thick unscented creams)

MILD TO MODERATE DISEASE

- Topical corticosteroids (BID)
 - Face: Hydrocortisone 1% ointment
 - Body: Betamethasone valerate 0.05% ointment
 - Topical calcineurin inhibitors
- Topical phosphodiesterase-4 inhibitor



MODERATE TO SEVERE DISEASE

- Phototherapy
- Immunosuppressants
- Biologics (dupilumab)





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