# **Atopic Dermatitis**

MD Information

Last updated: April 2021

This leaflet aims to provide information about:

- General treatment guidelines and patient education
- Management options
- Common complications
- Special considerations
- Guidelines for dermatology referral

Atopic dermatitis (eczema) is a common skin condition affecting the pediatric population. In the acute stage, it is characterized by poorly defined erythema with edema and vesicle formation leading to weeping and crusting. In the chronic stage, skin thickening, or lichenification, may be present. The disease is thought to be secondary to a dysregulation of the skin's barrier function. Most patients show spontaneous improvement throughout childhood with remission in the teenage years.

# General Treatment Guidelines and Patient Education

- Avoid triggers: wool or nylon clothing, scented products, irritants including soaps and detergents, etc...
- Bathing recommendations
  - Once daily bathing is recommended. Duration should be limited to 5 minutes.
  - Limited use of non-soap cleansers (that are neutral to low pH, hypoallergenic, fragrance free) is recommended.
  - A few recommended brands: Aquaphor Gentle Wash, Aveeno Advanced Care Wash, CeraVe Hydrating Cleanser, Cetaphil Gentle Cleanser
  - After washing, gently pat (not rub) the skin with a towel and immediately apply moisturizer.
    Moisturizers applied soon after bathing improve skin hydration in patients with eczema.
- Emollients (moisturizing creams) are the mainstay of therapy.
  - Emollient should be applied liberally and frequently over the entire body regardless of whether or not the patient is on topical corticosteroid therapy.
  - o Patients will require large quantities; 250 grams applied twice daily over one week.
  - Patients will only use products they like. Encourage patients to try several emollients to find one that suits them. Consider cost, texture (ointment, cream, lotion), and tolerability (some products may cause stinging). It is more important for the skin to be well moisturized regularly than it is for it to be moisturized too sparingly and inconsistently with a high-end product.
  - o In general, ointments and balms are better tolerated and more effective.
  - A few recommended brands:
    - Ointments: Aquaphor, Vaseline
    - Creams: CeraVe, Cetaphil RestoraDerm, Eucerin Eczema Relief, CutiBase
    - Higher-end products: Lipikar AP+ Balm, A-Derma Exomega Control, Bioderma
- The pamphlet "Parent's Guide to Atopic Dermatitis", prepared by the MCH Pediatric Dermatology group can be accessed at http://www.muhcpatienteducation.ca/DATA/GUIDE/798\_en~v~parent-s-guide-to-atopic-dermatitis.pdf
- Prescribe sufficient quantities of emollients and topical treatments.
- ➤ A general rule for topical steroid therapy:
  - o Ointments should be used in the drier winter months or when eczema is more active.
  - o Creams are preferred for exudative and weeping lesions and in the summer.
- ➤ Titrate topical steroid potency to eczema severity. A short course (1-2 weeks) of a potent strength topical steroid may be required for resistant lichenified plaques or for severe flares, after which the treatment can be weaned down to moderately/mildly potent topical corticosteroids.
- Due to misinformation, patients are often fearful of using topical corticosteroids. This may lead to poor compliance and treatment failure.
  - Remind patients that skin thinning / atrophy are mainly seen after prolonged use of potent steroids on delicate areas of skin such as the face and folds.
  - Treatments (including those prescribed to the face or to babies) should be continued until 2-3 days after the red and rough areas have resolved, up to a maximum of 3 weeks of continuous treatment.
  - o All red and rough areas can be treated at the same time.
  - Avoid using phrases like: "apply a thin layer", "avoid prolonged use" (too vague), or "discontinue after 7 days" (may not be sufficient) which may contribute to corticophobia.

# Management of Eczema

# ❖ Normal skin with no evidence of active eczema

Skin appears soft and supple (not red or itchy)

Emollients regularly to maintain soft and supple skin.

#### Mild eczema

Areas of dry skin, mild itching and redness







#### **Emollients**

+/-

# Face and folds:

Mild potency topical corticosteroids

 Example: Hydrocortisone 1% cream/ointment once daily x 14-21 days or until 48 hours after clinical resolution, whichever occurs first.

### **Trunk and limbs:**

Mild potency topical corticosteroids

 Example: Desonide 0.05% cream/ointment BID for up to 14-21 days or until 48 hours after clinical resolution, whichever occurs first.

Specifications on organizing follow-up: No follow-up in dermatology required

# Moderate to severe eczema

Areas of dry skin, frequent itching, redness with or without excoriation & localized skin thickening





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#### **Emollients**

#### **AND**

#### Face and folds:

Mild potency topical corticosteroid

 Example: Desonide 0.05% cream/ointment BID for up to 2-3 weeks or until 48 hours after clinical resolution, whichever occurs first.

### **Trunk and limbs:**

Moderate potency topical corticosteroid

 Example: Elocom 0.1% ointment once a day for up to 2-3 weeks or until 48 hours after clinical resolution, whichever occurs first.

Specifications on organizing follow-up:

Please fax a consultation to pediatric dermatology at TCC with the patient's age, sex, timing and distribution of lesions, treatment prescribed. Please also highlight the diagnosis of moderate/severe eczema, to be seen in 3-4 weeks.

FAX: 514-228-1197

# Complication

#### Infected eczema

(2° infection typically by staphylococcus and/or streptococcus species)

Consider if there is weeping, crusting, pustules, pain, fever/malaise, rapidly worsening disease, or eczema failing to respond to therapy.



### Treatment

- Mild and localized infection without systemic symptoms:
  - Culture lesion
  - o **Topical antiobiotics** (ex: Fucidin or Bactroban)
  - Standard atopic dermatitis treatment (ie: use of topical corticosteroids) can be started/restarted after 48 hours
- Widespread disease or systemic symptoms such as fever/malaise, pain, and swelling:
  - o Culture lesion
  - Systemic antibiotics (ex: cephalosporin)
  - Standard atopic dermatitis treatment (ie: use of topical corticosteroids) can be started/restarted after 48 hours
- Crusts can be removed by soaking in lukewarm water or applying wet compresses for 10 minutes a few times per day, followed by immediate application of topical therapy.

Specifications on organizing follow-up:

Please fax a consultation to pediatric dermatology at TCC with the following information: age, sex, timing and distribution of lesions, treatment prescribed. Please also *highlight the diagnosis of infected eczema, to be seen in 2-3 weeks.* FAX: 514-228-1197

Eczema herpeticum (2° infection by Herpes Simplex Virus)

Consider if there is sudden worsening of atopic eczema, significant pain, clusters of small uniform "cold sore-like" blisters/vesicles, fever, lethargy and malaise.



Contact the dermatology call service immediately.

If lesions are near the eye or involve the eyelid margin, the **ophthalmology** call service should be consulted.

# **Special Considerations**

#### Oral Antihistamines

- There is insufficient evidence to recommend the regular use of antihistamines as part of the treatment of atopic dermatitis. However, in cases where itching disrupts sleep (especially in moderate/severe eczema), short-term intermittent use of a sedating, first-generation antihistamine may be beneficial in complementing topical therapies.
- Examples:
  - Diphenhydramine (Benadryl) 5mg/kg daily, divided into 3-4 doses, with a max daily dose of 300mg/day
  - Hydroxyzine (Atarax) 2mg/kg daily, divided into 2-3 doses, or 1mg/kg before bed.
- The use of sedating antihistamines in school-age children may negatively affect school performance, warranting attention to dosage and scheduling.

# Patient with Frequent Flares

- Treat each flare as moderate to severe eczema.
- Then, to lengthen the flare-free interval, apply:
  - Desonide 0.05% cream 2 days / week to areas that flare frequently on face for 4 weeks
  - o Elocom 0.1% ointment 2 days / week to areas that flare frequently on body for 4 weeks.
- Specifications on organizing follow-up:

Please fax a consultation to pediatric dermatology at The Children's Clinic (TCC) with the patient's age, sex, timing and distribution of lesions, treatment prescribed. FAX: 514-228-1197

# **Guidelines for Dermatology Referral**

- Diagnostic uncertainty
- Suspected contact dermatitis
- Lack of satisfactory response to treatment after 6 weeks
- Recurrent bacterial superinfections
- Significant psychosocial derangement secondary to eczema

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The recommendations provided in this document are based on up-to-date evidence and expert opinions. However, the educational material contained herein is NOT a substitute for clinical judgment that is required to meet the different needs of individual patients. For more information, please consult a physician.

<sup>\*</sup> Please specify indication on consultation sheet, as well as age, sex, and treatment prescribed to date. FAX: 514-228-1197