WET DRESSING FOR DERMATOLOGICAL CONDITIONS: HITH PATIENT MANAGEMENT

PRACTICE GUIDELINE ©

DOCUMENT SUMMARY/KEY POINTS

- Patients are required to meet the *Admission to Hospital in the Home* criteria.
- Children who require treatment for dermatological conditions including eczema can safely and effectively be treated at home in a HITH (Hospital in the Home) model of care.
- The primary treatment of eczema (atopic dermatitis) involves the management of pruritus and settling the inflammation of the skin.
- Wet dressings are applied in conjunction with topical steroids and moisturisers. Applications of wet dressings are usually prescribed 2-3 times per day in order to settle the skin inflammation.
- Due to the chronic nature of eczema, it requires proficient management and comprehensive education for the parent/carers, to ensure ongoing effective management outside of hospital.
- Parents must participate in the education process for the practice to be successful. It is the responsibility of the parent/carer to apply the third dressing of the day when undertaking wet dressings.
- Bleach baths and antibiotic therapy may be used as adjuncts when prescribed.

The following Practice Guideline identifies:

- Process and criteria for admission to the HITH service
- HITH Treatment Plan
- Wet Dressing equipment and procedure
- Education Tools required to aid and support parents
- Exclusion criteria

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

Approved by:	SCHN Policy, Procedure and Guideline Committee	
Date Effective:	1st November 2021	**Review Period**: 3 years
Team Leader:	Clinical Nurse Specialist	**Area/Dept**: HiTH

CHANGE SUMMARY

- Document due for mandatory review.
- Recommend to read the entire document as there are amendments made through out.

READ ACKNOWLEDGEMENT

- SCHN nursing staff, Dermatology and medical teams who refer eczema patients to HITH are to read and acknowledge they understand the contents of this document.

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1 Introduction

Hospital in the Home (HITH) provides **acute and post acute hospital substitution and/or hospital avoidance services**. The aim is to provide multidisciplinary care to allow the patient to be managed in their own home or clinical setting. The premise is that in the absence of these services patients would either be admitted to hospital or occupy a hospital bed for a longer period.

Children who require treatment for major dermatological conditions, including management of severe eczema, with wet dressings and up to 5 days of education can safely and effectively be treated at home in a HITH model of care.

2 Process for Referral and Admission to HITH

2.1 Admission criteria

Management of severe eczema or other major dermatological conditions requiring wet dressings should be managed in an Ambulatory model of care using HITH (criteria outlined in *Admission to Hospital in the Home*). The exception to this is for patients who meet the following exclusion criteria:

- Patients requiring intravenous antibiotics greater than twice a day
- Significant social issues and/or risk of non-compliance with treatment plan
- A HITH social work consult is recommended to determine barriers/issues that maybe overcome
- Previous wet dressing education
- Does not meet criteria of Home Risk Assessment (HRA)
- Does not meet the *Admission to Hospital in the Home* admission criteria

Patients may be admitted to HITH via:

- GP with admitting rights to SCHN or following consultation with accepting SCHN Medical Officer (AMO)
- Referral from Outpatient Department SCHN
- Transfer from inpatient ward
- Referral from ED

3 Treatment

3.1 Aim of treatment

The aim of treatment is to reduce associated pruritus and inflammation by improving the absorption of topical corticosteroids, cooling and hydrating the skin and reducing discomfort. Additionally, wet dressings provide a temporary protective barrier from skin trauma associated with scratching. The application of the treatment is taught to parents so they are able to independently manage future outbreaks within their homes.

HITH treatment plan

- The patient is admitted to HITH for up to 5 days.
- Treatment is conducted within the patient's home or appropriate clinical setting. HITH staff visit twice daily attending to 2 wet dressings per day. Parents attend to 1 wet dressing per day.
- The aim is to build parental capacity to self-manage wet dressings for their child; therefore HITH staff will gauge appropriateness of reducing visits to daily or utilising Telehealth models of care
- Parents administer oral antibiotics if prescribed.
- A nurse-initiated discharge occurs following completion of the treatment plan, unless a medical review is indicated

(Refer to Appendix B Wet Dressing Treatment Plan)

4 Wet Dressing Application

4.1 Equipment

- Creams/ointment/moisturiser
- Cotton linen (hospital sheets) or 100% cotton clothing or commercially prepared Wet Dressing Garments e.g. Tubifast® garments (supplied by parents). Garments can be purchased at the Help Centre (Sydney Children's Hospital Randwick Only)
- Crepe bandages. Bandages are secured by tucking them in and covering with Tubifast® or similar cotton stretch bandaging.
- Clean bowl filled with warm water
- Gloves
- Spatula (tongue depressor) or spoon to decant moisturizer

4.2 Procedure

1. Explain procedure to child and parents/carers. Encourage care providers to participate in the wet dressing process.
2. Use distraction techniques (music, singing songs, games, watching TV/ipad) during the dressing process as it helps to make the process more relaxed.
3. Apply prescribed amount (in fingertip units) of topical steroid over all affected eczematous areas (Refer to Appendix A: Medication Therapy). Apply sufficient to make skin shine and rub in well.

Note: Different steroid creams and ointments may be used for the body and face

4. Apply moisturiser as ordered over the topical steroid to the entire body, being generous with the application and massage well into skin. It is recommended the moisturiser is decanted using a spoon or spatula rather than fingers, then applied to the skin to avoid cross contamination.
5. Linen pieces, cotton clothing or Tubifast® garments should cut to fit each limb and area of the body so that it covers all of the skin.
6. Linen pieces, cotton clothing or Tubifast® garments should be soaked in warm water and applied to affected areas. These should not be dripping, but sufficiently wet to remain damp until the next dressing.
7. ***Note:*** *Between dressing changes parents may spray the base layer with warm water from a clean trigger pump to prevent the dressing from drying out.*
8. Where linen pieces are used wrap with crepe bandage. Ensure bandages are applied firmly but not tightly as to impede circulation and comfort. Do not allow bandages to come in contact with bare skin, as they are rough and can irritate sensitive skin. Apply tubular bandages over dressings to keep the dressing in place. A vest can be made out of large Tubifast® by cutting slits near the top as armholes.

4.3 Face Dressing

- Apply prescribed topical steroid and moisturiser over the affected area.
- Cut a piece of linen or Tubifast® to create a facemask; cut holes for the eyes, nose and mouth.
  Note: It is important that the sheet does not cover the eyes, nose or mouth.
- Soak linen or Tubifast® in warm water
- Apply to face, ensuring the mask does not cover mouth, nose, eyes and secure with crepe bandage or second layer of Tubifast®. A Tubifast® 'cap' may be applied to the head to hold dressing in place.

Note: *Face dressings must be removed for children less than 2 years prior to sleep to promote safe sleeping practices as per SIDS guidelines*

5 Skin Assessment

(Used in conjunction with power chart Dermatology Assessment Chart)

Dry Skin

- Dry to touch, flaking of the skin may be present

Erythema

- Redness of the skin, disappearing upon blanching (finger pressing)

Papules

- Small, solid lesions on the skin, not containing pus

Vesicles

- Liquid filled cavity under the skin, commonly called a blister

Pitting Oedema

- Swelling under the skin, which leaves an indentation when pressure is applied

Oozing Lesions

- Lesions discharging fresh serum, pus or blood & skin debris, occurs when superficial layers of the skin has been damaged, usually through scratching. Dries to leave crusts around the lesion

Lichenified Plaque

- Thickening of the skin, may develop into exaggerated of skin markings

Infected Lesions

- The presence of dried/ fresh serum, pus or blood & bacterial debris

Eczema Severity

Mild	Areas of dry skin, with or without areas of redness
Moderate	Areas of dry skin & redness, with or without excoriation & localized skin thickening
Severe	Widespread areas of dry skin, redness, excoriation, extensive thickening, oozing, cracking and alteration of pigmentation of the skin

6 Infection

Skin infections in eczema patients may be caused by bacteria (Impetigo) or viruses (*Herpes simplex virus*/*Varicella zoster virus*)

If the patient's eczema is suspected of being infected, both viral and bacterial swabs should be taken and arrangements made for the child to be reviewed by the admitting medical team for appropriate management of the infection.

Oral antibiotic therapy may be commenced for the treatment of impetigo and treatment of eczema may continue within the home.

Herpes simplex infection needs to be treated with an antiviral for 5-7 days. Older infants/children can be treated with oral aciclovir. Young infants and older children who are systemically unwell with eczema herpeticum or who are not improving with oral therapy require hospital admission and intravenous aciclovir. Staff should follow the Aciclovir: Intravenous Drug Protocol and consult with Infectious Disease (ID) team for further management. Wet dressing treatment may commence during the hospital admission.

(Please see Appendix A: Medication Therapy)

7 Parent Education

Parent education involves clear instructions and hands on demonstration of the application of wet dressings. This enables parents to subsequently initiate treatment early if their child has a relapse and improve adherence to treatment therapy.

Parents are given “Wet Dressings for Eczema” Information for Parents and Carers booklet or Fact Sheet http://www.schn.health.nsw.gov.au/files/factsheets/eczema_wet_dressing-en.pdf

HITH staff will demonstrate how to prepare for dressings and the application of creams/ointments and the wet dressing whilst the parent/s watches the procedure. Parents are encouraged to become involved as soon as possible and are assisted by HITH staff to attend the wet dressing during treatment until they no longer require assistance.

Parents are educated on the use of prophylactic bleach baths and occasionally oral antibiotic to prevent chance of skin infection during the course of the patient’s treatment.

Parents are educated on aggravating factors to prevent future “flare ups” of the child’s skin and what measures that can be put in place (Please see Appendix C Aggravating Factors)

Parent’s ongoing questions are able to be answered within the home.

Useful Information and Resources:

- Eczema Factsheet – SCHN
- Eczema Wet Dressing Video – SCHN
- Wet Dressing Factsheet – SCHN
- Formula for Bleach Bath, Royal Children's Hospital Melbourne

Appendix A: Medication Therapy

- **Oral Antibiotic:** Cefalexin 12.5mg/kg/dose 6-hourly
- **Topical Corticosteroid**:

For sensitive areas (face, nappy):

  - Hydrocortisone 1% cream or ointment
  - Pimecrolimus 1% (Elidel®) cream
  - Methylprednisolone aceponate 0.1% (Advantan® lotion)

For body:

  - Methylprednisolone aceponate 0.1% (Advantan® cream, ointment, fatty ointment, lotion)
  - Mometasone furoate 0.1% (Elocon® cream, ointment).
  - Betamethasone dipropionate 0.05% (Diprosone® /Eleuphrat®)

- **Moisturiser:** Dermeze® is the most commonly used moisturiser or emulsifying ointment. Ointment used generously and applied to entire body
- **Oral antiviral**: Aciclovir 10 - 20mg/kg FOUR to FIVE times a day
- **Intravenous anti-viral:** Aciclovir – please refer to Aciclovir: Intravenous Drug Protocol

Fingertip units and children (Topical corticosteroid use)

A fingertip unit (FTU) of cream or ointment is measured on an adult index finger before being rubbed onto a child. One FTU is used to treat an area of skin on a child equivalent to twice the size of the flat of an adult's hand with the fingers together. You can gauge the amount of topical steroid to use by using your (adult) hand to measure the amount of skin affected on the child. A fingertip is from the very end of the finger to the first crease in the finger

FTU guide for application of corticosteroids in children

	Face/Neck	Arm/Hand	Leg/Foot	Chest/Abdomen	Back/Buttocks
3 – 6 Months	1	1	1.5	1	1.5
1 -2 yrs	1.5	1.5	2	2	3
3 - 5 yrs	1.5	2	3	3	3.5
6 + yrs	2	2.5	4.5	3.5	5

Appendix B: Wet Dressing Treatment Plan

Day 1	Day 2 – 4	Day 5
Admitted or transferred to HITH – hospital admission documentation, HRA and consent completed	HITH staff will gauge appropriateness of reducing visits or utilising Telehealth models of care	A nurse-initiated discharge occurs following completion of the treatment plan, unless a medical review is indicated. If indicated, a medical review will be scheduled with the admitting medical team at CHW or SCH.
Daily skin assessment, noting affected areas (Please see chapter 5. Skin Assessment). Document skin assessment online in Powerchart	Daily skin assessment, noting affected areas (Please see chapter 5. Skin Assessment). Document skin assessment online in Powerchart	
Report any oozing and swab moist skin lesions	Report any oozing and swab moist skin lesions	
Commencement of an oral antibiotic	Continuation of an oral antibiotic	
Daily bath or shower (2-3 mins only)	Daily bath or shower (2-3 mins only)	
Application of topical corticosteroid cream/ointment to affected eczema lesions x 3 per day. Apply using FTU's, enough to make skin shine and rub in well.	Application of topical corticosteroid cream to affected eczema lesions x 3 per day. Apply using FTU's, enough to make skin shine and rub in well.	
Overall application of topical moisturising cream/emollient to patient's entire body x 3 per day (Parent to observe dressing procedure and complete night time dressing)	Overall application of topical moisturising cream/emollient to patient's entire body x 3 per day (Parents to participate in dressing procedure in addition to completing night time dressing)	Moisturiser/emollient used daily as maintenance therapy to keep skin hydrated even when there are no signs/symptoms of eczema Parent able to attend to dressing independently
Application and education of wet dressing x 3 per day Note: Face dressings must be removed for children less than 2 years prior to sleep to promote safe sleeping practices as per SIDS guidelines.	Application and education of wet dressing x 3 per day	
TPR daily.	TPR daily.	
Weight attended		

Appendix C: Aggravating Factors

Parents are educated on the following known aggravating factors for future management:

1. Skin dryness:

   To prevent skin dryness, the patient is to bathe in luke-warm water daily for 2-3mins only. Do not use soap or shampoo. Use soap-free substitutes only that will not irritate the skin. Moisturise the patient's body each day post bath. Use fresh, clean towels after every bath to prevent infections.

   Keep fingernails short to avoid skin trauma from scratching

2. **Abrasive Clothing:**

   The patient is to wear clothing that is soft, 100% cotton or cotton polyester. Wool is to be avoided even over clothing or coming into contact with woollen garments worn by adults. Acrylic jumper may be worn during winter.

3. **Abrasive surfaces/chemical irritants:**

   Carpets, sand & sheepskins are extremely abrasive to the eczema patients' skin and should be avoided.

   Dummies, dribbling or food around the mouth can also irritate the skin. Parents should apply thick moisturiser around the mouth, wash the skin with a soft, wet towel after eating and then reapply the moisturiser

4. **Overheating:**

   Heat can aggravate sensitive skin. To avoid overheating use warm bath water, don't over dress the patient and fan/air conditioners can be used to cool the skin in the summer months.

5. **Allergy Measures:**

   Patients may have allergies to food, animals and dust mites. The following precautions should be used:

   i. Skin prick testing can be done post treatment to alert to any allergies

   ii. Dust mite precautions should be discussed with the child's dermatologist. See: http://chw.schn.health.nsw.gov.au/ou/kols/resources/dermatology/hourse_dust_mite_reduction_measures.pdf

   iii. These include: dust mite covers on bedding, cotton blankets or polyester quilts, non-carpet floorings, no floor rugs, no soft furnishings or soft toys and blinds are recommended in place of curtains.

   iv. Clothing & bedding to be routinely washed in hot water in allergy sensitive detergent.