

Nursing protocol of care

Care of the child with wet wraps using Betnovate 1 in 10



Atopic Eczema is a common inflammatory condition of the skin; affecting 1 in every 5 children in the UK at some stage (Goodyear and Harper 2002). Atopic Eczema is an episodic disease with periods of exacerbation and remission (NICE 2007). The term atopic describes a group of conditions such as asthma, eczema and hayfever which are linked by the increased activity of allergy component of the immune system the cause of which can be both environmental and genetic (BAD 2013).

Eczema causes the skin to become itchy and inflamed which causes the skin to become red and dry and in severe cases may result in weeping, blistered, crusted, scaly and thickened skin (Peate, 2011). The state of skin can have detrimental effects on the child's sleep which causes tiredness and irritability (Goodyear and Harper 2002).

NICE guidelines (2007) suggests Eczema should be treated in a stepped approach which is individualised for each patient. Emollients form the basis of Eczema treatment and should be applied regularly even when the skin is clear. Topical steroids are used to treat exacerbations. In severe cases when eczema cannot be controlled with topical creams alone 'wet wraps' may be the appropriate form of treatment (BAD 2013).

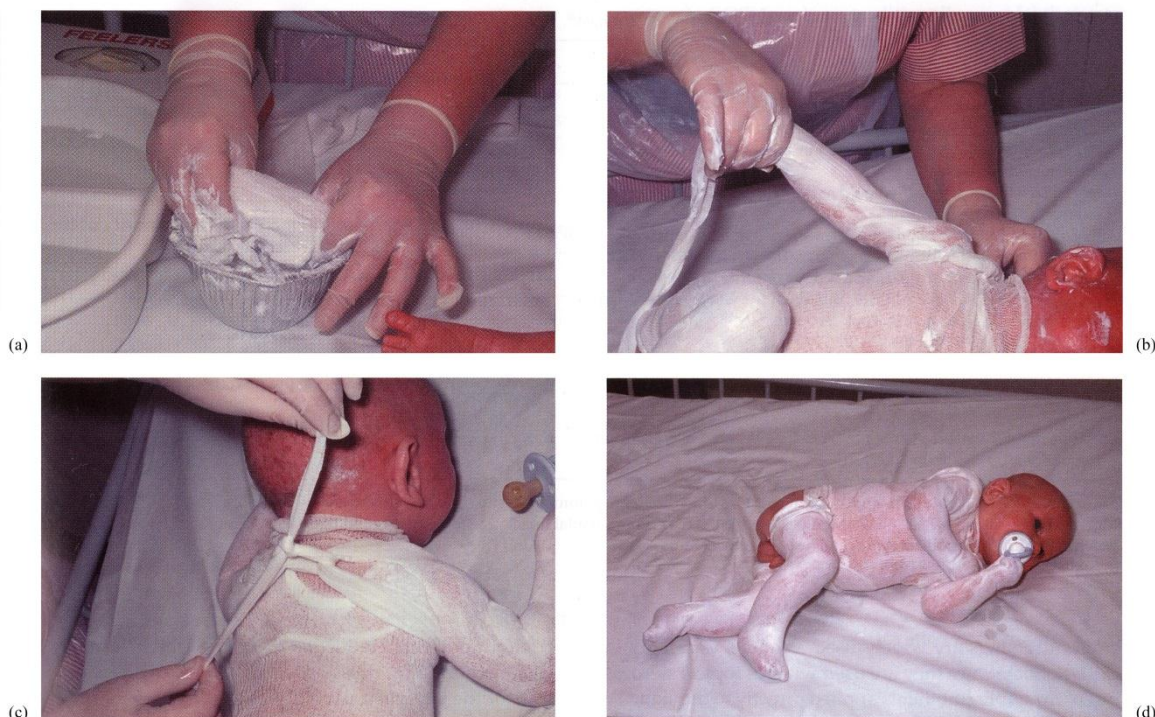
Wet wrap treatment consists of tubigauze bandages soaked in steroid being applied to the whole body to provide an occlusive dressing preventing itching and improve retention of the steroid treatment on the skin (Goodyear and Harper 2002). Wet wraps must not be applied over infected skin without antibiotic cover (NICE 2007).

Initial assessment on admission

- Nose, throat and skin swabs for MC&S including MRSA screen (Rationale 1)
- Full MRSA screen if colonised. (Rationale 2)
- Baseline temperature, pulse respiratory rate and BP. Thereafter twice daily unless condition indicates an increase in frequency (Rationale 3)
- Record Height and weight and plot on appropriate growth chart (Rationale 4)
- Establish food allergies and contact dietician with requirements (Rationale 5)
- Assess skin and record within the risk assessment paperwork (Rationale 6)

Treatment procedure

- Cut appropriately sized pieces of the cotton tubular bandage (tubigauz) for the arms leg and trunk. The length needed for limb measurement is approximately 3 times the length of the tip. Two separate lengths are needed for the trunk, measurement is from the base of the skull to below the bottom. Ensure small arm holes are cut a third of the way down the bandage (Rationale 7)
- Dispense Betnovate cream 1 in 10 into a silver bowl and warm in a tub of hot water. (Rationale 8)
- Bath in luke warm water with an appropriate bath emollient (e.g Oilatum, Dermol 600) (Rationale 9)
- Use an appropriate soap substitute to wash (eg. Dermol 500, Aquamax) (Rationale 10)
- Pat dry following the bath (Rationale 11)
- Fold each bandage in half and soak only half of individual pieces of Tubegauz in Betnovate 1 in 10 cream (not water) (Rationale 12)
- Begin with the arms. Put on the wet layer first and apply more Betnovate cream over the bandage before twisting the bandage at the fingertips and folding back on itself to provide a second dry layer. Ensure the child can still move their fingers freely inside the bandage (Rationale 13)
- Next complete the trunk applying the 'wet' layer first before the dry layer and finish with the legs (Rationale 14)
- Secure the arm and leg bandages to the trunk section by cutting small holes in the trunk section (Rationale 15)
- Keep hands covered. If the child is a thumb sucker a small hole can be cut into the bandage (Rationale 16)



(a-d) Wet dressings for inpatient treatment using Tubegauz®.

Treatment regimen

- Dressings are changed twice daily by nursing staff usually to complete treatments. (Rationale 17)
- Apply separate topical preparations to the face and neck as prescribed (Rationale 18)

Treatment immediately after the application of dressing

- The child will continue to receive appropriate prescribed topical steroid treatment applied to the residual or recurrent areas of eczema (without the use of dressings). This may be carried out as an inpatient or as an outpatient (Rationale 19)
- The use of a moisturising agent during the day to all areas of dry skin (2-3 times daily) (Rationale 20)

General measures

- Twice daily cool baths with an oily bath emollient (Rationale 21)
- Use a soap substitute, such as Aquamax or emulsifying ointment to wash (Rationale 22)
- If there is any suspicion of secondary bacterial infection, oral antibiotics should be prescribed by the doctor (Rationale 23)
- A sedative antihistamine is also helpful with this situation and should be given as prescribed (Rationale 24)
- Loose cotton pyjamas should be worn over wet dressings (Rationale 25)

Discharge planning

- Educate caregivers on treatment and management at home, support with written instructions (Rationale 25)
- Liaise with GP and community paediatric team as appropriate (Rationale 26)
- Outpatient follow up appointment within 2-3 weeks (Rationale 27)

NB: If there is overt impetiginization then wet dressings should be delayed until 48-72 hours after commencing antibiotics and when appropriate treatment has been confirmed from the skin swab results. If eczema herpeticum is suspected then this is an absolute contraindication to the use of wet dressings and the child must be reviewed by a consultant to decide on further management.

Rationale 1 – To detect secondary infection

Rationale 2 – To ensure early detection, increased risk as transferred from local hospital

Rationale 3 – To obtain the normal range, to not carry out unnecessary nursing intervention

Rationale 4 – To monitor growth and calculate drug dosages and adhere to hospital policy

Rationale 5 – To ensure provision of appropriate foods during diet kitchen opening times

Rationale 6 – To assess severity of eczema and monitor progress

Rationale 7 – The technique involves two layer bandaging

Rationale 8 – To prevent the creams from stinging the skin

Rationale 9 – To cleanse skin and introduce moisture

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The child first and always

- Rationale 10 – Normal soap is too drying for the skin
- Rationale 11 – Rubbing the skin can increase irritation
- Rationale 12 – This technique required two layer bandaging
- Rationale 13 – Completing the arms first prevents the child scratching during the treatment
- Rationale 14 – This enables all affected areas on the limbs and trunk to be covered by a dressing impregnated with steroid cream.
- Rationale 15 – This completes the dressing
- Rationale 16 – To minimise damage from scratching
- Rationale 17 – There is usually rapid improvement, and in most cases >90% clearance of eczema during this time.
- Rationale 18- Areas not covered by wet dressings
- Rationale 19 – Treatment continues after discharge as it allows the skin to stabilize
- Rationale 20 – To maintain integrity of the skin barrier
- Rationale 21 – To cleanse and hydrate the skin
- Rationale 22 – Normal soap is too drying and can irritate the skin
- Rationale 23 – Skin infection may be responsible for the exacerbation of eczema
- Rationale 24 – To help settle the child
- Rationale 25 – To prevent the child becoming cold
- Rationale 26 – Essential so that control of eczema is maintained
- Rationale 27 – To ensure child and caregiver are supported locally
- Rationale 28 – To closely monitor progress and review long-term treatment

References

Reference 1

British association of dermatologist (2013) Atopic eczema: Patient information leaflet. 1-9

Reference 2

Goodyear H, Harper J (2002) Wet wrap dressings for eczema. An effective treatment, but not to be misused. British Association of Dermatology. Vol 146 (1) 158-159

Reference 3

Nice (2007) Atopic eczema in children (CG57). London. National Institute for Health and care Excellence.

Reference 4

Peate I (2011) Eczema: Causes, symptoms and treatments in the community. British Journal of community nursing. 16 (7) 324-331

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