## Paste Bandages and Wet Wraps:

## A Practical Guide to Their Use in the Management of Eczema











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## Paste Bandages and Wet Wraps: A Practical Guide to Their Use in the Management of Eczema

### Introduction

This booklet explains how paste bandages and wet wraps may be useful additions in eczema management for you or your child.

## General guidelines for using paste bandages and wet wraps

Paste bandages and wet wrapping techniques using medical-grade viscose garments or viscose tubular bandages in conjunction with other topical eczema treatments, especially emollients (medical moisturisers), can help to break the itch-scratch cycle, protect the skin from damage, and control flare-ups in moderate to severe eczema.

Simple itch-control methods should be explored before paste bandages and wet wraps are considered (see National Eczema Society's Itching and Scratching booklet for details of these). Paste bandages and wet wraps are not a treatment in themselves, but can be especially useful when there is severe night-time itchiness and scratching that not only keeps the person awake but also breaks their skin's surface.

It is important that the patient is first assessed by a healthcare professional familiar with bandaging and wrapping as part of an eczema management routine – for example, a GP, practice nurse, or children's community nurse with a special interest in eczema, or someone from the dermatology team. Together you can decide if this approach would be beneficial for you or your child.



Your healthcare professional should demonstrate the correct use of either paste bandages or wet wraps (you would try one at a time) and provide you with ongoing support regarding their application alongside your other eczema treatments.

Paste bandages, and tubular bandages used for wet wrapping, can be prescribed by your healthcare professional. Bandages are generally only prescribed for people with severe eczema. Garments are usually excluded from all formularies, so will need to

be purchased as they are unlikely to be prescribed. Ask your healthcare professional which ones are suitable for you and which ones you are entitled to on the NHS.

These items can also be purchased without a prescription from your local pharmacy (although you might need to ask them to order them in) or online. They should not, however, be used until the eczema has been assessed and a plan of care has been put in place, which includes being shown how to use these products.

## Types of bandages and garments

#### **PASTE BANDAGES**

These are available as:

- Bandages (including a stocking bandage called Zipzoc) impregnated with a paste containing zinc oxide
- Bandages impregnated with a paste containing zinc oxide + ichthammol

#### VISCOSE GARMENTS

Viscose garments for eczema are made from medical-grade viscose, with polyamide and elastane for added stretch. They are available in different sizes and as various items of clothing. Manufacturers are:

- Clinifast
- ComfiFAST
- Skinnies
- Tubifast

#### **VISCOSE TUBULAR BANDAGES**

Viscose tubular bandages – like the garments – are made from medical-grade viscose, with polyamide and elastane for added stretch. They also come in different widths: red line (3.5 cm), green line (5 cm), blue line (7.5 cm), yellow line (10.75 cm), beige line (17.5cm); ActiFast and Tubifast are available in purple line width (20 cm). Manufacturers are:

- ActiFast
- Clinifast
- ComfiFAST
- Tubifast





#### **CAUTION**

- Care is needed when using topical steroids under paste bandages and wet wraps since the combination of dampness and occlusion (covering the skin) increases the potency of topical steroids. You should seek advice from your healthcare professional before using any type of topical steroid under paste bandages or wet wraps.
- Do not use topical calcineurin inhibitors – tacrolimus (Protopic) and pimecrolimus (Elidel) – under paste bandages or wet wraps.
- Do not use paste bandages or wet wraps if the eczema is wet or weepy or if there is any other sign of a skin infection. Paste bandages and wet wraps create a warm, humid environment that encourages bacterial growth, and this can cause an infection to spread. These treatments should therefore not be used in the visible presence of any bacterial, fungal or viral infection. If you think the skin is infected or it suddenly looks different (i.e. if it suddenly becomes more red or darker than vour usual skin colour, depending on skin tone, and itchy - or if there are wet and weepy areas or yellow crusts), stop using paste bandages and wet wraps, and seek advice from your healthcare professional.

# How can paste bandages and wet wraps help?

- They are soft and comforting next to the skin.
- Covering the skin with a protective physical layer means you are more able to break the itch-scratch cycle.
- Occlusion (covering the skin) is very helpful for preventing damage caused by scratching, particularly unconscious scratching during sleep. However, occlusion can increase the strength of your treatments, which may be desirable in the short term if closely supervised by a specialist skin doctor or nurse. It is important not to occlude the skin if it is infected.

#### Paste bandages

Paste bandages for eczema are impregnated with a paste containing zinc oxide or zinc oxide plus ichthammol. Zinc oxide and ichthammol are soothing and cooling ingredients that help to relieve irritation. There are several types available (e.g. Viscopaste and Ichthopaste), including Zipzoc, which is more like a stocking than a bandage.

Paste bandages can be used for entire limbs or for small patches of eczema, such as on an ankle or wrist. Paste bandages are not used for the trunk, neck or shoulders. Since they are messy, secondary bandages are needed to cover them and hold them in place.

Paste bandages are often left in place for 24 hours. The technique of applying the bandages must be taught, as they need to be pleated onto the limbs to avoid a tourniquet effect if the limb subsequently swells.

#### Silk garments

Silk garments are not used for wrapping but are mentioned here since they too feel soft and comfortable and are therefore often used as a replacement for pyjamas or as undergarments to provide a layer between clothing that irritates and the skin. For example, they are often worn under school uniforms, which tend to be made of synthetic material or contain wool, which can make the skin itch or feel sore.

Silk garments are available as tops, leggings and socks, gloves and face coverings, and come in various sizes for children and adults.

Silk garments are generally not included in formularies, so are rarely prescribed. Manufacturers are:

- Dermasilk
- DreamSkin Health
- Skinnies

Although people with more severe eczema are often positive about silk garments, a research study specifically looking at silk garments (published in 2017) showed they had no significant benefits for patients with eczema. For the results of the study, please visit www.nottingham.ac.uk/CLOTHES.

\*See National Eczema Society's Clothing and eczema factsheet, which you can download from the National Eczema Society website, for more details of eczema-friendly clothing and sleepwear.





#### Wet wraps

Wet wrapping uses double layers (one wet, and one dry on top) of readymade viscose garments. Alternatively, you can use double layers of viscose tubular bandages. Whether you use viscose garments or tubular bandages, the inner layer next to the skin is wet (the wet wrap) and the outer layer is dry. The wet wraps are soaked either in warm water or emollient (see Methods A and B instructions on page 14). A large amount of emollient is applied to the skin.

Wet wraps are believed to work by evaporation, rehydration and protection.

• EVAPORATION: The gradual drying-out of the wet layer has a cooling effect on the skin, helping to reduce itching and discomfort. It is therefore essential that the bandages are remoistened and not allowed to dry out completely. They dry out after about 4-6 hours depending on factors such as air temperature and how much

- emollient has been applied. See how to remoisten them on page 10.
- **REHYDRATION:** This means that moisture is put back into the skin. The skin absorbs the large amount of emollient used and is softened. The combination of occlusion and dampness will also boost the potency of any topical steroid used, so wraps are often applied at a different time of the day or an hour after topical steroid application to reduce this effect. However. occasionally a dermatologist will want to increase the potency of a topical steroid for a short period of time, and wet wraps may be used to occlude the topical steroid.
- PROTECTION: The two layers of wraps put a barrier between fingers and the skin. During scratching episodes the top layer slides over the bottom layer, absorbing the friction caused by scratching. The bottom wet layer stays adhered to the skin, protecting it. Together they reduce any damage caused by scratching and allow damaged skin a chance to heal.



# How to use paste bandages and wet wraps

The following section gives step-bystep guidance on applying and wearing paste bandages and wet wraps. The instructions are the same for treating adults and children. Full body wet wrapping should not be used in babies under 9 months, as it may affect their temperature control. Full body wet wrapping is usually used for toddlers and younger children. Adults and older children are only likely to tolerate wet wrapping on small areas of skin.

The process of putting paste bandages and wet wraps on children can be very time-consuming so it is important to do as much preparation as you can in advance (see Preparation Box opposite) and make it fun. You might choose to start small: applying the paste bandages or wet wraps to a smaller area of the body, such as the legs only, and for a shorter time - such as for the duration of a film. Leaving the paste bandages or wet wraps on for a short time and removing them when the child wants them removed gives the child control over the process and will make it feel less daunting.

#### **Preparation**

Before you apply wet wraps or paste bandages:

- Cut paste bandages, viscose garments or viscose tubular bandages to the desired size (see pages 12-13), preferably using nurses' scissors, which have a blunt end and a sharp point. (Remember to keep all scissors out of children's reach.)
- Have a warm bath using a soap substitute and/or an emollient bath oil.
- Pat the body dry using a soft towel.
- Apply topical steroids to the areas of active eczema only if your doctor has advised you to use them under wet wraps or paste bandages (see Caution on page 4). Leave a 20-minute gap before applying emollient to the skin.
- If using wet wraps, apply a thicker-than-usual layer of leaveon emollient (moisturising cream or ointment).
- If using paste bandages (or silk clothes as undergarments), just apply a normal amount of emollient.



If the child is old enough, encourage them to participate in getting everything ready. Make an extra set for their favourite doll or toy. Put the paste bandages or wet wraps on your child while they are watching a film or programme, or sing songs/nursery rhymes to entertain them. It may be helpful to have a special distraction that you only use to entertain your child when bandaging or wrapping, so that they associate this with being a fun time. For children aged 3–8 years, make a star chart with reward stickers for cooperative behaviour.

#### Using paste bandages

Paste bandaging must be demonstrated and taught by a healthcare professional in a practical session. The instructions here are only a guide to prompt your memory.

**SUITABLE FOR:** Adults' and children's feet, ankles, lower legs, wrists and arms.

**USE ON:** Mostly for severe excoriated (severely scratched) patches of eczema on limbs (e.g. wrist, elbow, ankle, knee) but whole limbs can be bandaged too.

**USE WITH:** Leave-on emollients, topical steroids (see Caution below).

WHEN TO USE: Usually at night as they are messy and stain clothing.

FOR HOW LONG: Can be left in place for up to 24 hours and then replaced as necessary (for children this extended use is usually more practical on nonschool days). Once the eczema is under control and the skin has healed, paste bandages can be discontinued and you should revert to your usual eczema management routine.

#### **CAUTION**

- Care is needed when using topical steroids under paste bandages and wet wraps since the combination of dampness and occlusion (covering the skin) increases the potency of topical steroids. You should seek advice from your healthcare professional before using any type of topical steroid under paste bandages or wet wraps.
- Do not use with topical calcineurin inhibitors (e.g. Protopic and Elidel).
- Whenever you change the paste bandages, check for signs of infection (see Caution on page 4), and do not use on weeping eczema or infected skin.
- Paste bandages are non-elastic, so they must be pleated onto the limb so they can expand if there is swelling. Pleating allows more freedom of movement once the paste bandage is in place and compensates for any shrinkage of the paste bandage as it dries out).
- If bandages adhere to the skin, they will need to be soaked off.



## APPLYING PASTE BANDAGES TO THE LEGS

- Start at the base of the toes. Wrap the paste bandage around the ball of the foot or heel, smoothing it into place.
   After each turn, reverse the direction of the winding to form a pleat.
- Continue up the lower leg and over the knee to the top of the leg, smoothing the paste bandage into place and reversing the direction of the winding (clockwise/anticlockwise) with each turn to make a pleat. You will end up with a series of pleats.
- Secure the paste bandage in place with a dry bandage, such as a cohesive bandage, which adheres to itself (for example Coban or K-Press). Ensure there is a little (but not excessive) tension. Bandage the foot and knee with a separate length of dry bandage to allow more flexibility.
- If the toes are affected, small strips of paste bandage can be wrapped around individual digits and moulded for comfort.

## APPLYING PASTE BANDAGES TO THE ARMS

- Start at the hand and work up the arm.
   Wrap the paste bandage around the wrist, smoothing it into place. After each turn, reverse the direction of the winding to form a pleat.
- Continue up the arm and over the elbow, smoothing the paste bandage into place and reversing the direction of the winding (clockwise/anticlockwise) with each turn to make a pleat. You will end up with a series of pleats.
- Secure the paste bandage in place with a dry bandage, such as a cohesive bandage that adheres to itself (for example Coban or K-Press). Ensure there is a little (but not excessive) tension. Cover the paste bandage on the elbow with a separate length of dry bandage to allow more flexibility.
- If fingers are affected, small strips of paste bandage can be wrapped around individual digits and moulded for comfort.

## PATCH WRAPPING WITH PASTE BANDAGES

- Simply cut the paste bandage to the required length and wrap around the area of eczema, smoothing the bandage into place.
- Secure with a secondary cohesive bandage.



#### Using wet wraps

Wet wrapping is usually done using a double layer of viscose garments, which come as different items of clothing and in various sizes. Alternatively, a double layer of viscose tubular bandages may be cut to size to make up a body suit (see pages 12–13).

Body heat tends to make wet wraps dry out and become uncomfortable. Therefore they need to be kept moist by regular spraying with water (see box below). For this reason, wet wraps are mainly used on children or adults who are waking anyway through the night because of their eczema.

There are various methods for applying wet wraps, Methods A and B (see page 14) being the most common.

## How to keep wet wraps damp

Wet wraps can dry out after about 4–6 hours, especially in the summer, and will need to be kept damp by regularly applying water.

If the bandages dry out, remove the top layer and wet the lower layer using a clean spray bottle filled with warm water, or a wet sponge dabbed on the lower layer. Reapply the top layer.



**SUITABLE FOR:** All ages, although whole body wet wrapping is usually used only on young children.

**USE ON:** Whole body (toddlers and young children), limbs and patches of eczema (adults and older children).

**USE WITH:** Leave-on emollients, topical steroids (see Caution on page 11).

WHEN TO USE: Although whole body wet wraps are sometimes used during the day, they are not a practical option during school time because of the need to keep them wet. School-aged children are also likely to feel embarrassed about wearing bulky bandages that make them look different from their peers.

FOR HOW LONG: This will depend on how you or your child respond to treatment. Generally speaking, wet wraps should only be used with topical steroids for a short period of time (e.g. up to 7 days) and the eczema should be regularly assessed by your healthcare professional (see Caution below). In the case of severe chronic eczema, if wet wraps are proving successful, you can continue to use them with emollients only. Once the eczema is under control, wet wrapping can be discontinued and you can revert to vour usual eczema management routine.

#### **CAUTION**

- Care is needed when using topical steroids under paste bandages and wet wraps since the combination of dampness and occlusion (covering the skin) increases the potency of topical steroids. You should seek advice from your healthcare professional before using any type of topical steroid under paste bandages or wet wraps.
- Whenever you change the wraps, check for signs of infection (see Caution on page 4), and do not use on weeping eczema or infected skin.
- Do not use with topical calcineurin inhibitors (e.g. Protopic and Elidel).





#### Cutting viscose tubular bandages to size

Wrapping is usually done using ready-made viscose garments, which come as different items of clothing and in various sizes. These garments can be trimmed to the areas you are needing to wrap (e.g. if the person's trunk needs treating but their neck is fine, you can trim down the neck on the top garment to make it more comfortable).

Tubular bandages are rarely used these days for whole body wrapping. However, if limited areas of the body are being treated, they may be the best option.

Viscose tubular bandages may also be cut to size to make up a body suit after measuring, as described below. (Please note: It is generally best to cut the bandages a little on the long side and then trim, rather than having them too short.)

- ARMS Measure from the person's shoulder to the tip of their index finger. You need two bandages (one for each arm) and two further bandages as there is an inner and an outer layer. (If you wish, make holes for the thumbs and little fingers.)
- LEGS Measure from the person's thigh to their ankle and then along their foot to the end of the big toe. You need two bandages (one for each leg) and two further bandages as there is an inner and an outer layer.
- BODY Measure from the nape of the person's neck to the base of their buttocks. You need two bandages as there is an inner and an outer layer. Cut an armhole at each side.



• TIES – If you are making a body suit, cut eight strips of bandage, each with a width of 2.5 cm (1 in). Cut small holes above the armholes in the vest you have created and cut corresponding holes at the top of the bandages used for the arms. Then cut corresponding holes at the bottom of the vest and at the top of the bandages used for the legs.

Thread the strips through the holes and tie with a small bow so that the body suit holds together.







#### Wet wraps methods

There are some variations throughout the UK so the method you are taught may depend on where you live.

Method A and Method B are the two methods most commonly used. Both involve having an inner layer of viscose garment or viscose tubular bandage, which is moist, and an outer layer, which is dry. Wet wraps have been shown not to affect people's core temperatures.

**METHOD A** involves soaking the inner layer of viscose garment or viscose tubular bandage in water.

**METHOD B** involves soaking the inner layer of viscose garment or viscose tubular bandage in large amounts of emollient.

Whichever method you use, it is more beneficial if you apply the wet wraps after bathing.

Occasionally your healthcare professional might advise you to use topical steroids under wet wraps. If they do, it is important that you check with them which topical steroid they want you to use and how to apply it. It could be a different topical steroid to the one you have been prescribed for use without wet wraps and they might wish you to apply it differently too.

#### **METHOD A**

- After a bath and before putting on the inner layer of wraps, apply a thicker than-normal layer of emollient – the greasier the better – to all of the skin.
- Soak the inner layer of viscose garment or viscose tubular bandage in warm water. Wring out the excess so that it is still very wet but not dripping, and put it on.
- Put a dry layer of viscose garment or viscose tubular bandage on top of the wet layer.

#### METHOD B

- After a bath and before putting on the inner layer of wraps, apply plenty of emollient to all of the skin.
- Coat the inner layer of viscose garment or viscose tubular bandage with a really thick layer of leave-on emollient and place on the limbs and trunk as required (the side of the garment or bandage that is coated with emollient should be next to the skin). Put a dry outer layer on top of the inner layer.

### Manufacturers

There are several manufacturers of bandages and wet wraps.

#### **ActiFast**

(2-way Stretch Tubular Retention Bandage)
L & R Medical UK Ltd
https://lohmann-rauscher.co.uk/bandages/actifast

#### Clinifast

(Tubular bandage for dressing fixation/retention and wet and dry wrapping. Fabric content: 92% viscose, 5% elastane, 3% polyamide) Clinisupplies www.clinisupplies.co.uk

#### **ComfiFAST**

(ComfiFAST tubular bandages are used for dressing retention, wet and dry wrapping of atopic eczema and skin covering for fragile skin)
Vernacare
www.vernacare.com

#### DermaSilk

(medical-grade silk garments) Espère Healthcare Ltd www.dermasilk.co.uk

#### DreamSkin Health

(medical-grade, polymer-coated silk garments)
www.dreamskinhealth.co.uk

#### **Ichthopaste**

(bandage impregnated with paste containing ichthammol and zinc oxide)
Evolan Pharma AB
https://pastebandagesevolan.com

#### **Skinnies**

(seam-free viscose and silk garments)
Dermacea Ltd
www.skinniesuk.com

#### **Tubifast**

(garments and tubular bandages) Mölnlycke Health Care AB www.molnlycke.com

#### **Viscopaste**

(bandage impregnated with paste containing zinc oxide) Evolan Pharma AB https://pastebandagesevolan.com

#### **Zipzoc**

(stocking impregnated with paste containing zinc oxide) Evolan Pharma AB https://pastebandagesevolan.com



### Summary

- Bandages and wraps are very helpful in reducing damage caused by scratching and in helping to break the 'itch-scratch' cycle. They also help people with eczema feel more comfortable.
- Bandages and wraps are most useful at night and may help improve sleep by keeping the person cool and reducing itch.
- Paste bandaging and wet wrapping can be very time-consuming and require substantial cooperation on the part of a child. Should your child get upset by having to wear paste bandages or wet wraps, give them a break. Never let bandaging or wet wraps become a stressful bedtime routine, otherwise your child will not settle and sleep well.

- Covering the skin with paste bandages and wet wraps increases the strength of a topical steroid, so seek the advice of your healthcare professional before using your usual topical steroid under wraps or bandages.
- Do not use paste bandages and wet wraps with topical calcineurin inhibitors.
- Never use paste bandages and wet wraps if eczema is infected.
   Seek advice from your healthcare professional if you suspect infection.
- Remember there is no 'one-size-fits all' approach, and bandaging and wet wrapping will not suit everyone.
- Silk garments can help to protect the skin against synthetic clothing when there is no option to wear pure cotton (e.g. they are comfortable to wear under a school uniform).

## Further information from National Eczema Society

More information than can be given in a booklet of this size is available from National Eczema Society. We have other booklets including:

- Childhood Atopic Eczema
- Itching and Scratching
- A Guide for Teenagers with Eczema
- All About Contact Dermatitis

Booklets and factsheets can be downloaded from our website or ordered from our Helpline.

Website: www.eczema.org

Helpline: Telephone\* 0800 448 0818 (Monday to Friday 10am to 4pm) \* Calls are free from UK landlines. Charges vary from mobiles.

#### Email: helpline@eczema.org

We are proud of the wealth of information available on our website and recommend you visit it whenever you need information. You can also check out our Facebook, Instagram and Twitter pages for eczema tips and news.

Our confidential telephone and email Helpline is at the heart of our work, providing information, support and reassurance to thousands of people struggling to cope with eczema. We are not medically qualified and do not diagnose, prescribe, give medical advice or opinions on treatments prescribed by your healthcare professional. We do, however, offer a wealth of practical information about the day-to-day management of eczema and the different treatment options available.

The Helpline is open to all UK residents who are affected by eczema. Please allow five working days for us to reply to emails. We are not able to answer queries from non-UK residents as terminology, healthcare systems and treatments may differ in your country of residence, which may cause confusion.

In addition, National Eczema Society publishes Exchange, a magazine packed with:

- articles on eczema management
- features by people with eczema sharing their experiences
- treatment and research news
- experts' replies to your questions.

You can subscribe to *Exchange* for £25 p.a. at www.eczema.org or by calling our administrative office on 020–7281 3553.



National Eczema Society
11 Murray Street
Camden
London NW1 9RE

Eczema Helpline: 0800 448 0818
Email: helpline@eczema.org

www.eczema.org

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This edition was reviewed and updated in February 2023 by Helen Dennis, Dermatology Nurse Adviser to National Eczema Society.

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