

How to use and apply wet dressings

NINA WINES BSc, MB BS, DRACOG **ALAN J. COOPER** BSc, MB BS, FACD **ANN LANE**

The application of wet dressings can aid the management of acute inflammatory skin conditions. This article is a simple guide to using wet dressings in the outpatient setting.

Although inpatient application of wet dressings is associated with better results than outpatient care, inpatient care is, at times, not suitable or practical for some patients – for example, patients may have work or family commitments that prevent hospitalisation. Wet dressings in the home may also be used after discharge from hospital to manage minor flares in responsive skin conditions, such as eczema and psoriasis. Patient education and practical advice given by the general practitioner may help to improve the management of these skin diseases.

Wet dressings: when to use them What do they do?

Wet dressings have many effects. Chiefly, they allow greater penetration of topically applied agents by increasing the humidity and moisture content of the skin.^{1,2} They also decrease itch and erythema by inducing vasoconstriction, and assist draining from the deeper layer to the surface of the epidermis,^{3,4} which aids the debridement of scales, crusts and exudate.⁴

Dr Wines is Sexual Health Registrar, Royal North Shore Hospital, St Leonards, NSW, and has completed Part I of the FACD; Dr Cooper is Head, Department of Dermatology, Royal North Shore Hospital, St Leonards, NSW; Sr Lane is a Clinical Nurse Specialist, Department of Dermatology, Royal North Shore Hospital, St Leonards, NSW.

The psychological impact of dressings is also important to consider: in our experience, patients often describe a feeling of wellbeing and a sense of control when their skin condition is being managed with wet dressings.

Who needs them?

Generally, most patients with an acute inflamed skin rash will benefit from the

Table 1. Conditions treated with wet dressings

- Eczema
- Psoriasis
- Allergic contact dermatitis
- Generalised erythrodermas
- Bullous diseases
- Herpes zoster
- Acute sunburn
- Stasis dermatitis
- Lichen planus (acute, mild cases)⁵
- Radiation injury⁶
- Leg ulcers⁷
- Acute osteomyelitis⁸

short term application of a wet dressing. Acute eczema, allergic contact dermatitis, psoriasis, drug eruption, generalised erythrodermas and certain bullous diseases are some of the skin conditions

Table 2. Solutions for wetting dressings

Solution	Comments
Tap water	• For clean, noninfected, non-oozing, noncrusting wounds
Burow's solution	• For cleansing and disinfecting open, oozing, crusting or secondarily infected lesions • Use a 5% solution diluted 1:20 to 1:40 in water ¹⁰
Saline	• For cleansing open, oozing wounds
Potassium permanganate	• May be helpful for fungal infections or any open infected wound ¹⁰ • Stains the skin • Use a 0.1% solution in distilled water, diluted 1:7 to 1:10 with water (if crystals used, first dissolve crystals in water and then dilute until solution is pale-pink) ¹¹

that respond to wet dressings. These and further conditions that benefit from the application of a wet dressing are listed in Table 1.⁴

What types are there?

There are three types of wet dressings: open, covered and occluded.

Open wet dressings

Open wet dressings allow rapid evaporation and cooling. Moist gauze or a pad is applied to the involved area, without any covering.

Open wet dressings are useful in treating acute burns.

Covered wet dressings

If covered with dry material (e.g. a towel, dry flannel), open wet dressings become covered wet dressings. Covered dressings also allow evaporation, but cooling and drying are not as rapid.

Most acute inflammatory skin rashes benefit from this form of dressing, and covered wet dressings are the most commonly used form of wet dressing.

Occluded wet dressings

Occluded wet dressings are moist dressings covered with plastic. Unlike open and covered wet dressings, occluded wet dressings do not evaporate and therefore

generate heat and cause maceration.⁴ Whereas open, and to a lesser degree covered, wet dressings lower the temperature of the skin, occluded dressings increase the temperature of the skin.⁹

Occluded dressings are effective for some chronic eczematous or psoriasiform lesions. Prolonged use can result in folliculitis or systemic absorption of topically applied medications.¹⁰

Wet dressings: how to use them What topical agents or solutions can be used?

Usually, a topical (anti-inflammatory) corticosteroid is applied to the skin before

A step-by-step guide for the application of wet dressings

When most of the body is involved

Step 1. Prepare equipment:

- Cream or ointment
- A bucket or bowl of warm water or prescribed solution
- Wet dressing material (pyjamas, gauze, dishcloths, pillowcases, washcloths, towels)
- Dry material to cover the dressing (e.g. old pyjamas, bath towels, bathrobes, blankets)
- Cover the bed with a plastic draw sheet, followed by a full sheet set.

Step 2. Bathe in a warm tepid bath, then pat damaged skin dry.

Step 3. Apply cream or ointment to damaged skin (Figure 1a).

Step 4. Wet the dressing material or pyjamas in the bucket/bowl of solution and wring out.

Step 5. Apply wet dressings or dress in the warm, wet pyjamas (Figure 1b).

Step 6. Cover with one hot blanket (Figure 1c); blankets can be warmed in the dryer.

Step 7. Cover with plastic draw sheet (Figure 1d).

Step 8. Cover with two more hot blankets.

Step 9. Remove after (at least) one hour.

Leave the dressing on for at least one hour. If you are prescribed continuous dressings, keep the wet dressing on for six hours, then remove it, and repeat the above process after 30 minutes using

fresh dressing material. Bathing between dressings is recommended.

It is important to ensure that the dressing does not dry out, as dry dressings lead to dry skin that results in pruritus. However, dressings that are too wet won't evaporate and will not be effective.

When specific parts of the body are involved

The same principles apply, but the following practical tips for different regions of the body may be helpful.

The face

Before wetting the dressing cloth, cut a hole for a mouth in the material, or alternatively use two pieces of cloth and place around the mouth (Figure 2). Don't cover the dressing with dry flannel, simply remoisturise the wet dressing every two hours to hold it in place.

Note that weaker steroids are required for use on the face. If patients are using stronger steroids to treat skin disease on other parts of the body advise them to place the weak steroid on the face first before applying the stronger steroid to other parts of the body. This will avoid the transference of strong steroid to the face, which can damage the skin in this region.

The hands and feet

Either tubular gauze, wet towels or 'blueys' are effective dressing materials. Apply as demonstrated in Figure 3.

The limbs

Tubular gauze or wet towels can be used to wrap single limbs with disease involvement. Follow the same basic technique as outlined earlier, but wrap elbows and knees when they are in the bent position, so that circulation and movement are not impaired.



Figures 1a to d. Applying wet dressings. a. Step 3 (top left). Apply cream, ointment or emollient to affected area. b. Step 5 (left). Dress patient in warm wet pyjamas. c. Step 6 (top right). Cover patient with one hot blanket. d. Step 7 (bottom right). Cover patient with plastic draw sheet. See the box on page 96 for all 9 steps.

the application of the wet dressing. Creams are the agents of choice as they are better absorbed. However, creams should be used with caution as they contain potential allergy-inducing preservatives.¹

In addition, the dressings have to be wet in a solution. Solutions for wetting dressings are listed in Table 2. Tap water can be used for clean, noninfected wounds. If the wound is infected, Burow's solution may be required – a combination of aluminium sulfate, acetic acid and calcium

carbonate made up in varying proportions. Aluminium acetate acts as an astringent, decreasing exudate related to the precipitation of protein.¹⁰ Potassium permanganate solutions have been used to treat fungal infections, but have the disadvantage of staining the skin.

How do I apply wet dressings?

There are many techniques used to apply wet dressings. Wet towels, tubular gauze bandages, elasticated tubular net, surgical

stocking net, and wet pyjamas are all effective dressing materials.

Nursing practitioners with many years of experience in the application of dressings believe that wet pyjamas are the simplest and most effective means of applying wet dressings, in both the home and hospital settings. We believe that wet pyjamas are best used if most of the body is affected by the skin condition being managed; when specific parts of the body are affected, such as the face or



Figure 2. Wet dressings for the face: place cloth on the face, allowing patient to breath easily.



Figure 3. Wet dressings for the hands and feet. 'Blueys' are effective dressing materials for the hands and feet. Wrap them around the foot as demonstrated in this photograph.

hands, wet pyjamas may not be practical.

Techniques for applying dressings are discussed in the box on page 96 and illustrated in Figures 1a to d, 2 and 3. As well as describing what to do when the whole body is involved, tips are provided for when specific parts of the body, such as the face and hands and feet, are involved.

How long do I use them for?

The continuous application of dressings is usually required to manage acute rashes: apply the dressing for six hours, remove for up to half an hour and then repeat the process.^{1,4} This is difficult from a practical point of view, as the patient will have to remain immobilised.

Practicalities need to be discussed before embarking on treatment. For some rashes it may be adequate to prescribe the dressing with intermittent dry periods, for example wet dressing for three hours twice a day. For acute flares of rashes after previous treatment, a single wet dressing may be adequate to settle the exacerbation.

Between dressings, a short warm bath or quick shower may help cleanse the skin of adherent scale. Extremes of water temperature should be avoided. Colloidal oatmeal or starch added to the bath has a soothing, antipruritic effect.

Covered wet dressings are normally only required for a limited period of time. Significant improvement may be noticed by two days. When lesions are flat and clean and the erythema has decreased (in about two to seven days) wet dressing can be ceased and the steroid cream can be replaced by an ointment to be used for a relatively prolonged period, and in some cases, most of the patient's life.

Conclusion

Wet dressings are, at times, indicated in the outpatient management of patients with some acute and acute-on-chronic inflammatory skin conditions. The correct choice of type of wet dressing, topical agent and wetting solution, and use of an effective application technique will help to make the most of the therapeutic response of such conditions to the application of wet dressings. **MT**

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