

Wet Wraps

Wet wraps can be a useful tool in the intensive treatment of atopic dermatitis. They serve as an effective barrier to scratching and increase skin hydration and rehydration, which, in turn, helps promote more restful sleep. Likewise, they act as an occlusive barrier that promotes penetration of topical corticosteroids into the skin, thereby increasing the amount of medication delivered to the affected areas of inflammation.

Wet wraps should be reserved for severe flares and used only for a few days at a time because they are time consuming and children often are resistant to their application. If overused, skin breakdown can occur, and if emollients are not used properly under the wraps skin dryness can actually be increased. There is also concern of increased penetration of topical corticosteroids secondary to the occlusive dressing, which, in turn, may lead to increased systemic absorption and increased risk for steroid side effects.

Here are our recommendations for applying wet wraps safely and effectively...

1. Gather your supplies.

- Topical steroid ointment and/or emollient prescribed by your physician.
- Warm water in a sink or a basin.
- The wraps themselves consist of a bottom (wet) and top (dry) layer. Gauze wrap (e.g., Kerlex®) or cotton sleepers, pajamas, or long johns may be used. Some places are even starting to sell wet wraps (check the Internet for some convenient and fun designs that you and your kids may appreciate!).

Alternatively, it is possible to use the "daddy sock" method for wrapping extremities: Simply cut a small hole in the toes of any adult-sized pair of 100% cotton socks to create a pair of tubular cotton bandages that fit easily over an extremity, can be moved up or down as needed, and can be washed and reused.

Whatever you chose to use, it will be necessary to have 2 layers; one for the "wet" layer and one for the "dry" layer.

2. Apply the steroid ointment to the patient's inflamed skin as directed by your physician.

3. Using tongue depressors or popsicle sticks (similar to how a spatula is used in cooking) helps you to avoid contaminating the medication supply with your hands, allows large areas to be covered quickly and evenly, and prevents the caregiver from being unnecessarily exposed to topical corticosteroids.
4. Apply emollient to the rest of the child's skin as directed by your physician.
5. Take a layer of the wrap (e.g., gauze or one sock) and soak it in warm water.
6. Wring out any excess water until this bottom "wet layer" is only very slightly damp.
7. Wrap the affected area with the "wet layer" material. Make sure the "wet layer" is not too tight that it affects the patient's circulation.
8. Immediately put the "dry layer" over the "wet layer." Do NOT cover with plastic, which may be a choking hazard.
9. Make sure the child remains in a warm environment.
 - This helps to promote a higher degree of humidity.
 - It also ensures that the child does not get too cold as the evaporation process happens.
10. Wet wraps are generally left in place overnight and are typically used for several days in a row. As always, follow the specific advice of your physician for actual frequency of change and duration of use.
11. Maintain close contact with your physician while undergoing the use of wet wraps and report any suspected adverse effects immediately.