

Topical Calcineurin Inhibitors

FREQUENTLY ASKED QUESTIONS



Eczema Education Series



www.eczemahelp.ca

Topical Calcineurin Inhibitors FAQ

At the Eczema Society of Canada, we are dedicated to helping Canadians living with eczema. This booklet aims to answer some common questions about the use of topical calcineurin inhibitors (e.g. Protopic® and Elidel®), a group of medications used to treat the inflammation of eczema. Speak to your doctor about any questions you may have related to the use of medications and your eczema care regimen.

About Topical Calcineurin Inhibitors (TCI)

How do Topical Calcineurin Inhibitors help eczema?

Topical Calcineurin Inhibitors (TCI) help control the inflammation of eczema by quieting down an overactive immune response in the skin. Eczema flares occur due to an inflammatory response in the skin, and the immune system plays a role in this inflammation.

When deciding on any treatment, the benefits and risks need to be weighed. Untreated eczema can have a negative impact on physical health, mental health, sleep, behaviour, social interactions, stress levels, ability to concentrate, and family dynamics.

Does eczema need to be treated with prescription medications?

The inflammation of eczema typically requires treatment. While moisturizing the skin is very important, it is often not enough to manage eczema flares.

Using Topical Calcineurin Inhibitors (TCI)

How do you use TCI?

TCI are topical medications which are applied directly to the skin. TCI can be prescribed for use for short, intermittent periods of time, to help manage eczema flares, and you would typically apply them every day until the flare goes away.

Will this medication sting my skin?

Some users report that the TCI medications sting or burn the skin for a few minutes when first applied, and for some people, this only occurs for the first few days of use.

If your eczema is very active, sometimes topical corticosteroids (a different class of medications) can be used for a few days to calm the skin before using the TCI, which may help to reduce stinging or burning associated with the TCI. Speak with your prescribing health care provider about how you should use your topical treatments.

What is the difference between topical corticosteroids (TCS) and topical calcineurin inhibitors (TCI)?

Topical Corticosteroids (TCS) are prescribed to reduce inflammation. Steroids are substances that occur naturally in our body, and TCS treat a number of inflammatory skin issues such as eczema.

Topical Calcineurin Inhibitors (TCI) are nonsteroidal medications that work by switching off the overactive immune system that causes inflammation and symptoms such as redness and itch.

Where should I apply my TCI medication?

TCI can be used on all body surface areas affected by eczema including sensitive areas such as the eyelids, face, neck, and skin folds.

Can I use TCI on my face and eyelids?

Yes, TCI are safe to use on the face and eyelids. They are also fine to use around the mouth, however when applying it to young children just remember to avoid getting in the mouth or eyes.

How much product should I apply?

Your doctor or pharmacist will likely provide you with specific instructions, and may use terms like “fingertip unit”. Typically, a thin film of product should be applied to the skin, but enough that it still feels slightly tacky after you have rubbed it in.

What is a “fingertip unit”?

A “fingertip unit” is a way to measure the amount of product you are applying to your skin. While only a general guideline, it can be a helpful way to understand how much cream or ointment is required to cover an area of skin. One fingertip unit is the amount of product squeezed onto an adult index finger, from the fingertip to the first crease. This amount should cover the size of two adult palms or approximately a 7”x 7” area of the body. For example, for an average adult, four fingertip units would be required to cover an entire arm or five fingertip units would be needed to treat an entire leg. This is likely more than you are used to using!

Should I apply the topical medication only to affected skin?

For use during flares, apply the medication only to affected areas and apply moisturizer to the rest of the skin.

For use as a maintenance therapy, such as with tacrolimus (Protopic®), the medication would be applied twice-weekly on areas of predictable flare. Speak with your prescribing health care provider to understand how you should use your topical medications to best manage your eczema.

Do I apply the treatment before or after moisturizer?

Medications should always be applied to your skin before any other products, as moisturizers can create a barrier on the skin. Apply TCI to affected areas first, then apply a moisturizer to the rest of the skin. Remember that your TCI medication is already in a cream or an ointment base, which also acts as a moisturizer, so there is no need to apply additional moisturizer on top of your TCI medication.

Is a cream or ointment base better?

The vehicle that delivers the TCI is either a cream (as with Elidel®) or an ointment (as with Protopic®). Some users prefer the feeling of an ointment and some prefer a cream. Speak to your doctor about your preferences, as no medication will work if you don’t apply it! Your doctor can help you find a treatment regimen that is right for you.

Generally speaking, ointments may be more hydrating to very dry skin, while creams may feel more comfortable on your skin and may be preferred before dressing.

Do I apply TCI on wet or dry skin?

TCI should be applied to dry skin. If applying after the bath, gently pat the skin dry with a soft, clean towel.

Can I use TCI medications as part of a maintenance therapy regimen?

Tacrolimus ointment (Protopic®) has been approved for twice-weekly application as a long term maintenance therapy in areas of predictable flare — this means the areas of the body that flare most frequently — and these areas may be different for each patient. Some patients find it helpful to select two days per week that are their “maintenance therapy” days - such as Tuesday and Friday. Speak to your or your child’s doctor to find a treatment regimen that is specific to your needs.

Safety

I heard TCI medications have a “Black Box” warning due to safety concerns. What does this mean?

In 2005, the FDA assigned a precautionary “Black Box” warning to TCI medications based on the theoretical risk that their use may be linked to an increased risk of some cancers. However, this decision was based solely on animal data available at the time. Since then, over a decade has passed, and, numerous studies have shown that TCI are safe and effective, and there is no clinical evidence of an increased rate of lymphoma when compared to the general population.^{1,2,3,4} This position is supported by the Canadian Dermatology Association. You may visit www.dermatology.ca for additional information and to read the Canadian Dermatology Association’s 2018 Position Statement on Topical Calcineurin Inhibitors.⁵

References:

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Complications of Eczema

How do I know if my eczema is infected?

If your skin is tender, oozing, or swollen, you should see your doctor, as it could be signs of infected eczema. Infection in eczema is somewhat common and can be treated.

What is eczema herpeticum?

Skin that becomes infected with the herpes simplex virus (the virus that causes cold sores) is called eczema herpeticum. Symptoms may include painful pus or fluid-filled blisters or sores, which may be accompanied by fever, tiredness, and swollen glands. Prompt treatment is very important, as the infection can spread to the eyes or internal organs, causing serious problems. See your health care provider immediately if you suspect you may have eczema herpeticum.

Consult your Health Care Provider

If you have questions or concerns about your eczema care regimen, side effects, medication safety, or want to discuss how to best use your prescribed treatments, consult your health care provider for more information or clarification.

For more information contact:

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The Eczema Society of Canada is a registered Canadian charity dedicated to eczema education, providing support, raising awareness, and supporting research.

The information contained in this document reflects the current standards of eczema management in Canada. Medicine is a constantly changing science, and this information was current as of the date of publishing.

The information contained within this guide should in no way dictate an exclusive treatment course. You should always seek diagnosis, treatment, and advice from a qualified physician.

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