Topical corticosteroids (TCS; see also NES information) are effective treatments for eczema and other inflammatory skin conditions, but like many treatments, they can have side effects. Many people with eczema are concerned about overusing TCS and the possible effects of stopping using them. Misunderstandings can arise too when people use words and names differently to describe effects. We hope to clarify the terms used and to address these concerns in this document.

We use the term ‘redness’ to cover a spectrum of pink, red, and purple, or subtle darkening of the existing skin colour, which can vary depending on the skin tone of the individual and the cause of the redness. Whereas redness may be obvious where it contrasts clearly against lighter skin tones, this is not necessarily the case in those with more richly pigmented skin, for example, black, brown, and olive skin tones. Similarly, in people with more richly pigmented skin, spots, and bumps may be skin-coloured, brown, or dark brown.

1. Consequences of excessive TCS use

Adverse effects can result from daily use of high-strength TCS over a long period (usually more than 12 months). The terms Red Skin Syndrome and Topical Steroid Addiction are used to describe several different medical conditions that can result from excessive TCS use; these are listed below. If people experience the following problems, they should seek advice from their healthcare professional. In most cases the TCS should be stopped.

a. Atrophy: the skin becomes thin, exposing tiny blood vessels that cause redness.
b. Rosacea: this affects the central face with redness, bumps, and pustules.
c. Acne: this affects the face and trunk of the body, with redness, bumps, pustules, and blackheads.
d. Peri-oral dermatitis (see also NES information) this affects the area around the mouth and eyes with redness and pimples. This is usually treated with antibiotics.

2. Allergic reactions to TCS

Some people with eczema are allergic to their TCS cream or become allergic after a period of use. The inflammation caused by TCS treatment can then outweigh the anti-inflammatory effect of the steroid within the cream, so the skin condition fails to improve. This is sometimes referred to as Topical Steroid Addiction (because it may seem as if more TCS is needed to achieve the same benefit). The culprit, which may be a preservative or other constituent of the cream rather than the steroid itself, can be identified by patch testing. This knowledge then enables people with eczema to avoid all skin preparations containing that specific substance. Allergy to the steroid itself is relatively rare and can sometimes be overcome by switching to a different type of TCS.

3. Failure to control the underlying inflammation.

For some people, their eczema is simply too severe to be controlled by TCS and the inflammation persists or worsens despite continued correct use of TCS. In this situation, medicine that suppresses the immune system is usually required (see above).
4. Consequences of stopping TCS treatment

Some people experience problems when they stop TCS treatment after using them for some time. These effects are sometimes referred to as Red Skin Syndrome, Topical Steroid Addiction or alternatively Topical Steroid Withdrawal (TSW) syndrome. Again, these terms can mean different things to different people, and are associated with a variety of medical conditions that need different treatment approaches:

a. Rebound erythema (redness). TCS are medicines known as 'vasoconstrictors': they close down tiny skin blood vessels, so the skin looks paler. When TCS treatment is stopped, rebound dilatation (enlargement) of the blood vessels occurs in the skin, and can cause redness and swelling. This usually settles down on its own with time.

b. Facial redness. Rosacea, acne, and perioral dermatitis caused by excessive use of TCS can worsen when TCS treatment is stopped. This is because steroids suppress inflammation.

c. Rapidly worsening redness, soreness, itch, scaling, and swollen glands. These may represent relapse or worsening of the underlying eczema after the anti-inflammatory steroid has been withdrawn. An alternative anti-inflammatory treatment or medicine that suppresses the immune system may be required.

d. Hypoadrenalism. This is serious and very rare. If a high-strength TCS is applied to large areas of skin over a prolonged period, some will be absorbed into the blood stream, as is the case when a steroid medicine is taken in tablet form by mouth (see also NES information). This can suppress the natural production of steroid hormones by the body’s adrenal glands. If this happens, people can become ill when they stop taking TCS due to lack of adrenal hormones (hypoadrenalism). To avoid this, TCS treatment should be reduced gradually to give the adrenal glands time to recover, and an alternative eczema treatment should be used if necessary. If tests confirm hypoadrenalism, it may be necessary to take hydrocortisone (a steroid tablet) by mouth until the adrenal glands recover.

5. Topical Steroid Withdrawal as a treatment approach for eczema

Concern over the use of TCS leads some people to try to manage their eczema without them. At first, the eczema is likely to get worse, but some people find that after a while it settles and can be managed with simple emollients or non-pharmacological therapies, and by making lifestyle changes to minimise triggers like stress. If the eczema persists or recurs, and the person does not wish to restart TCS, the dermatological treatment options include:

a. Ongoing use of emollients to treat dry skin and help repair and protect the natural skin barrier.

b. Interventions such as cool baths and bandages when the eczema is flaring.

c. Topical calcineurin inhibitor medicines such as tacrolimus ointment or pimecrolimus cream (see also NES information).

d. Phototherapy (ultraviolet light).

e. Medicines (taken by mouth or injection) that affect the whole body and suppress the immune system. These can have more serious side effects than TCS and are generally prescribed to people with more severe eczema who are not able to manage their condition using TCS.