Use an appropriately potent preparation for the shortest time required to control the skin disorder, then stop the corticosteroid.

The efficacy and potential for adverse effects of topical corticosteroids depend on the factors described below.

Corticosteroid potency and vehicle used

In general, acute inflammatory eruptions respond well to mild or moderate topical corticosteroids, the potent or very potent products being reserved for chronic, thickened dermatoses.

For a given strength of steroid, ointments are more potent than creams. This is because of the occlusive nature of ointment bases, which enhances penetration into the skin. Creams are suitable for moist and hair-bearing areas, while ointments are useful for their moisturising effect on dry and scaly areas. Other agents, such as propylene glycol, may also be added to vehicles to improve efficacy through increased penetration. The greater the corticosteroid potency, the greater the risk of adverse effects and the risk of rebound on cessation of treatment.

Information on the relative potencies of topical corticosteroids is contained in the following table.

Table D.20 Topical corticosteroids: potency of commonly used preparations

Corticosteroid	Strength
Mild	
Desonide	0.05%
Hydrocortisone	0.5–1.0%
Hydrocortisone acetate	0.5–1.0%
Moderate	
Betamethasone valerate	0.02–0.05%
Triamcinolone acetonide	0.02%
Potent	
Betamethasone dipropionate	0.05%
Betamethasone valerate	0.1%
Methylprednisolone aceponate	0.1%
Mometasone furoate	0.1%
Triamcinolone acetonide	0.1%
Very potent	
Betamethasone dipropionate	0.05% (optimised vehicle—OV)

Method of application

Initial treatment may often require a more potent corticosteroid and higher frequency of application, but as the condition improves both potency and frequency should be reduced. Once the condition has resolved, topical corticosteroids should be ceased; they are not used as preventive therapy. Prolonged use should be avoided wherever possible; intermittent therapy is preferred to continuous application for long-term use. Tapering doses following long-term therapy will reduce the chance of rebound flare and adrenal insufficiency.

According to the British Dermatology Working Group, current advice to patients to apply topical corticosteroid preparations ‘sparingly’ or ‘thinly’ contributes to ‘steroid phobia’, increasing the risk of poor clinical response and treatment failure. Most patients are prescribed topical corticosteroids of mild potency, for which the evidence suggests that the risk of harm is minimal. It is recommended that topical corticosteroids be applied according to the fingertip unit (FTU) rule. One FTU (the distance between the tip of the finger to the crease of the first joint) should cover the equivalent area of two palmar surfaces on the patient's body. One FTU in an adult is approx 0.5 g. More detailed information on FTU for topical corticosteroids can be found at www.patient.co.uk/showdoc/27000762.

Patients should also be advised that treatment should not exceed prescribed quantities.

Use under occlusive dressings (including gloves or plastic film) greatly increases corticosteroid absorption potentially increasing the risk of adverse effects. This approach is generally reserved for use on thickened skin areas such as the palms and soles of the feet.

Site of application

The thickness of the skin and local occlusive factors are important considerations in safe use of topical corticosteroids. Areas in decreasing order of penetration are mucous membranes > scrotum > axillae, perineal flexures > eyelids, face > chest, back > upper arms and legs > lower arms and legs > dorsum of hands and feet > palms, soles and nails.

Mild corticosteroids are preferred for the face and flexures, with short-term use of moderate agents if necessary. Potent or very potent agents are often required for management of disease on palms and soles.

Age of patient

An increased body-surface-to-weight ratio in infants, and the relatively thin skin in elderly patients, places these two groups at particular risk of adverse effects when topical corticosteroids are not used appropriately. The lower potency corticosteroids are preferred as first-line treatment. Particular care should be taken if application involves a large area or the nappy area.