

Topical corticosteroids

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Topical corticosteroids are used for a variety of dermatological conditions - dermatitis (atopic eczema), psoriasis, or in conjunction with anti-fungal agents for severe tinea.

There is a confusing array of topical steroid preparations available in Australia. The question is which to use, and when.

Potency is dependent on the type of corticosteroid, the vehicle it is applied with (i.e., lotion, cream or ointment) and whether an occlusive dressing is used.

Potency is directly proportional to the risk of side effects associated with their use. It is preferable to use the lowest potency agent required to effect treatment.

Main side effects are:

- loss of dermal collagen (skin atrophy, striae, fragility and easy bruising)
- telangiectasia
- and perioral dermatitis.
- In very large amounts of use, there is a theoretical risk of systemic effects such as suppression of the hypothalamic-pituitary axis.

In general we use lower potency topical corticosteroids in more sensitive areas like the face or scrotum, as there tends to be better absorption in these areas.

Potency

Type of corticosteroid:

Below is a list of potencies of topical corticosteroids (adapted from the Therapeutic Guidelines - Dermatology) (1):

Corticosteroid	Conc.	Trade names (Australia)
Class 1 (mild)		
desonide	0.05%	Desowen (lotion)
hydrocortisone	0.5, 1%	Dermaid cream, Dermain Soft Cream, Egocort cream 1%
hydrocortisone	0.5, 1%	Cortaid (cream), Cortef (cream), Cortic-

acetate		DS (cream and ointment), Sigmacort (cream and ointment)
Class 2 (moderate)		
betamethasone valerate	0.02%, 0.05%	Antroquoril (cream and ointment), Betnovate 1/2 (cream and ointment), Betnovate 1/5 (cream), Celestone M (cream and ointment), Cortival 1/2 (cream and ointment), Cortival 1/5 (cream)
triamcinolone acetonide	0.02%	Aristocort (cream and ointment), Tricortone (cream and ointment)
Class 3 (potent)		
betamethasone dipropionate	0.05%	Diprosone Dermatologicals (lotion, cream and ointment), Eleuphrat (lotion, cream and ointment)
betamethasone valerate	0.1%	Betnovate (cream and ointment)
methylprednisolone aceponate	0.1%	Advantan (lotion, cream, ointment, fatty ointment)
mometasone furoate	0.1%	Elocon (lotion, cream and ointment), Novasone (lotion, cream and ointment)
triamcinolone acetonide	0.1%	N/A
Class 4 (very potent)		
betamethasone dipropionate	0.5% in optimised vehicle	Diprosone OV (cream and ointment)

Vehicle

In ascending order of potency:

- lotion
- cream
- ointment
- fatty ointment (methylprednisone aponate, or *Advantan* only)

Occlusion

The topical corticosteroid is made more potent by the application of an occlusive dressing.

Other therapeutic management

Other things to bear in mind for dermatitis/ dry skin:

- Avoid soaps and perfumes. Use a soap substitute such as QV wash.
- Short showers, preferable less than 3 minutes and avoid overly hot water.
- Apply a hypoallergenic moisturiser all over after a shower, e.g., Sorbolene with 10% glycerine.
- Reapply moisturiser frequently.
- Cotton clothing. Avoid wool and synthetic fabrics against skin.

References

(1) Classification of potencies of topical corticosteroids (Table 4.9). *Therapeutic Guidelines: Dermatology (2004)*.

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