Chapter 13

Skin

13.1 Management of skin conditions

13.1 Vehicles

- The vehicle used in topical preparations influences skin hydration, has a mild anti-inflammatory effect and facilitates penetration of the active component.
- Creams are more cosmetically acceptable than ointments. Gels may be used on the face and scalp while lotions are used for moist conditions and hairy areas.
- Ointments are much less likely to sensitise and are suitable for chronic dry lesions.

13.1.2 Suitable quantities for prescribing

<table>
<thead>
<tr>
<th>Body Area</th>
<th>Non-corticosteroid cream/ointment</th>
<th>Corticosteroid cream/ointment</th>
<th>Lotions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face</td>
<td>15 to 30g</td>
<td>15 to 30g</td>
<td>100ml</td>
</tr>
<tr>
<td>Face and neck</td>
<td></td>
<td>15 to 30g</td>
<td></td>
</tr>
<tr>
<td>Both hands</td>
<td>25 to 50g</td>
<td>15 to 30g</td>
<td>200ml</td>
</tr>
<tr>
<td>Scalp</td>
<td>50 to 100g</td>
<td>15 to 30g</td>
<td>200ml</td>
</tr>
<tr>
<td>Both arms</td>
<td>100 to 200g</td>
<td>30 to 60g</td>
<td>200ml</td>
</tr>
<tr>
<td>Both legs</td>
<td>100 to 200g</td>
<td>100g</td>
<td>200ml</td>
</tr>
<tr>
<td>Trunk</td>
<td>400g</td>
<td>100g</td>
<td>500ml</td>
</tr>
<tr>
<td>Groins and genitalia</td>
<td>15 to 25g</td>
<td>15 to 30g</td>
<td>100ml</td>
</tr>
</tbody>
</table>

Recommended quantities are for twice daily application for 1 week in adults.

13.1.3 Excipients and sensitisation

- Possible contact sensitivity to preservatives or antiseptics is the reason for the range of topical agents.
- Fragrances are a major cause of skin sensitization, and as a general principle, products containing fragrance should not be prescribed.

13.2 Emollient and Barrier preparations

13.2.1 Emollients

Please be aware of the NPSA Alert - Fire Hazard with Paraffin Based Skin Products on Dressings and Clothing.
(http://www.nrls.npsa.nhs.uk/resources/?entryid45=59876)
The choice of emollient is guided by individual patient tolerance, preference and ease of use. Emollients soothe, smooth and hydrate the skin and are indicated for all dry scaling disorders. Emollients should be applied regularly to maintain improvement; and are particularly effective applied after a shower or bath. It is more cost-effective to prescribe emollients in large pack sizes.

**Light emollients**

**First choice;**
Cetraben® cream (pump pack)

**Second choice**
E45 Cream - Primary Care use only

**Medium emollients**

**First choice;**
Diprobase® cream

**Second choices;**
Doublebase® gel
Oilatum® cream
Unguentum® M cream
Aveeno® cream (see BNF for the list of clinical conditions & endorse prescription ACBS)

**Heavy emollients** - effective but not as cosmetically acceptable.

**First choice;**
Hydromol® ointment / cream

**Second choices;**
Epaderm® ointment
Liquid paraffin 50% / white soft paraffin 50%
Emulsifying Ointment BP

**Emollients containing urea**
Urea acts as a hydrating agent. It is used in scaling conditions and useful in the elderly. Occassionally used with corticosteroids to enhance penetration.

Balneum Plus® cream (urea 5%)
Nutraplus® cream (urea 10%)

**Emollients containing antimicrobial**
Appropriate for use if there are recurrent problems with infection.
Dermol® cream
Dermol 500® lotion

**Soap substitutes**
All emollients, with the exceptions of Doublebase® and liquid paraffin, may be used as soap substitutes. Aqueous cream may be used a soap substitute but is not recommended as an emollient because it may cause stinging in a high proportion of patients.
Consultant initiation only
Dexeryl cream – GREEN

Consultant Only
Cetomacrogol A cream - usually used as diluent.
Propylene glycol 40% in Unguentum M® Cream – Special order preparation can be made at LTHTr

13.2.1.1 Emollient bath additives and shower preparations
First choice:
Oilatum Junior emollient bath additive
Second choices:
Aveeno Bath oil
Hydromol Bath and shower Emollient®
Balneum® Plus Bath Oil
Dermol 600 bath emollient (contains antimicrobial agent)
Oilatum Plus bath additive (contains antimicrobial agent)

Oilatum Shower emollient
Dermol 200® shower emollient (contains antimicrobial agent)

13.2.2 Barrier preparations
These contain water-repellent substances; used on the skin around stomas, bedsores, pressure areas where the skin is intact.

Conotrane® cream
Metanium® ointment

13.3 Topical local anaesthetics and antipruritics

Topical antipruritics
The underlying cause of the pruritus should be treated. An emollient may be of value where the pruritis is associated with dry skin. Antipruritics are of limited value. Oral antihistamines may also be helpful for itch.
First choice:
Menthol 1% in aqueous cream (Arjun®)
Second choice:
Crotamiton cream (Eurax®)
Doxepin 5% cream (only licensed for pruritis in eczema, under 12yrs not recommended.)

Chronic urticaria
• Chlorphenamine may be added at night if sleep is disturbed by itching.
• Antihistamines should be taken regularly for best control. However, if urticarial flares occur at specific times, then they may instead be taken 1 hour before the anticipated exacerbation.
• Antihistamines – see section 3.4.1
• Cimetidine or ranitidine may also be added for resistant cases.
13.4 Topical corticosteroids

- See NICE TA81 – use the cheapest suitable option for atopic eczema and applied no more than twice daily.
- Corticosteroids are used to suppress the inflammatory reaction when other measures such as emollients are ineffective.
- Corticosteroids are not recommended in urticaria, rosacea, acne or when a primarily infective disease is suspected.
- To minimise the risk of side-effects, the smallest effective amount should be used, reducing strength and frequency of application as the condition settles. The risk of systemic side effects increases with prolonged use on thin, inflamed or raw skin surfaces, use in flexures, or use of more potent corticosteroids. Occlusion increases efficacy and side effects. Only mild corticosteroids should be used on face (not stronger than 1% hydrocortisone acetate).
- Gloves should be worn during, or hands washed after, application of large quantities of steroid preparations.
- The occlusive effect of ointments increases penetration of the corticosteroid.
- Topical corticosteroids should not be used on infected skin unless the infection is being treated.
- Antibacterials and antifungals with corticosteroids may have a role if there is associated infection. HPA advise that topical antibiotics should be reserved for very localised lesions to reduce the risk of resistance. Oral flucloxacillin or clarithromycin if penicillin allergic.
- Palms and soles may require potent or very potent steroids.
- Loss of effect with time (tachyphylaxis) can occur with prolonged use.
- Mometasone 0.1% (Elocon) cream or ointment may be prescribed once daily in situations where dressings are being used.

Creams are best for wet and weepy lesions.
Ointments best for dry and scaly lesions.

**Mild corticosteroid**

**First choice:** hydrocortisone cream or ointment 0.5%, 1%, 2.5%

**Mild corticosteroid with antimicrobial**

Hydrocortisone 1%, clotrimazole 1% cream (Canesten HC®)
Hydrocortisone 1% & miconazole 2% cream, ointment (Daktacort®)
Hydrocortisone 1% & clioquinol 3% cream, ointment (Vioform Hydrocortisone®)
Hydrocortisone acetate 1%, fusidic acid 2% cream (Fucidin H®)
Compound preparation with mild corticosteroid
Hydrocortisone 0.25%, crotamiton 10% cream (Eurax-Hydrocortisone®)

**Moderately potent corticosteroid**
First choice: clobetasone butyrate 0.05% (Eumovate)
Second choice: betamethasone valerate 0.025% (Betnovate-RD)

**Moderately potent corticosteroid with antimicrobial**
Clobetasone butyrate 0.05% & oxytetracycline3% nystatin cream (Trimovate®)

Compound preparation with moderately potent corticosteroid
Hydrocortisone 1%, urea 10%, lactic acid 5% cream (Calmurid HC®)

**Potent corticosteroid**
First choice: betamethasone valerate 0.1% (Betnovate)
Second choice: mometasone furoate 0.1% (Elocon)

**Potent corticosteroid with antimicrobial**
Betamethasone valerate 0.01% & clioquinol 3% cream, ointment (Betnovate-C®)
Betamethasone (as valerate) 0.1%, fusidic acid 2% cream (Fucibet®)
Fluocinolone acetonide 0.025%, clioquinol 3% cream, ointment (Synalar C®)
Betamethasone dipropionate 0.064%, clotrimazole 1% cream (Lotriderm®)

Compound preparation with **potent corticosteroid**
Betamethasone (as dipropionate) 0.05%, salicylic acid 3% ointment (Diprosalic®)

**Scalp applications with potent corticosteroid**
First choice: Betamethasone (as valerate) 0.1% (Betacap®)
Second choice: Betamethasone (as dipropionate) 0.05%, salicylic acid 2% (Diprosalic®)

**Very potent corticosteroid**
Avoid using long term without dermatologist supervision
First choice: Clobetasol propionate 0.05% (Dermovate)

**Very potent corticosteroid with antimicrobial**
Avoid using long term without dermatologist supervision
Clobetasol 0.05% & neomycin/nystatin cream, ointment (Dermovate-NN®)

**Consultant initiation only**
Mild:
Synalar 1:10
Moderate:
Modrasone
Synalar 1:4
Haelan and Haelan tape

Potent:
Locoid
Synalar
Nerisone
Cutivate
Metosyn
Betesil medicated plaster

Very Potent:
Nerisone Forte

13.5 Preparations for eczema and psoriasis

13.5.1 Preparations for eczema

First step:
Emollient +/- antiseptic
Topical corticosteroid

Second step:
Zinc paste and ichthammol bandages BP 1993 (“Ichthopaste”)
Zinc paste bandages BP 1993 - PB7 bandage (Viscopaste)
Tubifast bandage

Additional prescribing advice:
• Oral immunosuppressants should only be prescribed on specialist advice.
• Oral Alitretinoin should only be prescribed under a consultant dermatologist.
  (NICE TA177)
• Tacrolimus ointment 0.03% or 0.1%, or Pimecrolimus cream 1% should be for hospital initiation only. (NICE TA82)

13.5.2 Preparations for psoriasis

• More specific treatments for chronic stable plaque psoriasis on the trunk and limbs, involves the use of vitamin D analogues.
• Potent and very potent topical steroids should be used on specialist advice only; they may precipitate unstable and pustular psoriasis after stopping.

Vitamin D and analogues
First choice;
Calcipotriol 50micrograms/gram (Dovonex®) cream, ointment, scalp solution
betamethasone 0.05% ointment, Gel (Dovobet®)
Betamethasone 0.05% scalp gel (Xamiol)
Second choice;
Calcitriol 3 micrograms/gram ointment (Silkis®)
Tacalcitol 4 micrograms/gram (Curatoderm®) ointment

Tazarotene
Tazarotene 0.05% gel (Zorac)

Coal tar (licensed products)
First choice;
lotion - 5% coal tar solution (Exorex®)
Second choice;
scalp ointment - 12% coal tar, salicylic acid 2%, precipitated sulphur 4%, in a coconut oil emollient (Cocois®)
cream - 5% coal tar extract, hydrocortisone 0.5%, allantoin 2% (Alphosyl HC®)

Coal tar (unlicensed products)
Variety of strengths in yellow soft paraffin – Special order preparation can be made up in LTHTr
Cade oil (Consultant initiation only) Special order preparation can be made up in LTHTr

Dithranol (licensed products)
Dithranol (Dithrocream®) cream 0.1%, 0.25%, 0.5%, 1%, 2%

Dithranol (unlicensed products (usually made up for inpatients only))
Dithranol – variety of strengths in zinc and salicylic acid (Lassar’s paste)
extemporaneous preparation for long contact time
Dithranol 0.5%, 1% pomade and salicylic acid 0.5% in RVI emulsifying base
extemporaneous preparation for short contact time.

Consultant only - Hospital only

Acitretin (Neotigason) - Specialist supervision (RED)
Phototherapy:
5-Methoxypsoralen 20mg tablets (unlicensed product)
8-Methoxypsoralen 10mg tablets (unlicensed product)
8-Methoxypsoralen 0.005% 50g Gel (unlicensed product)

Fumaderm® – Unlicensed in the UK. Specialist supervision
13.5.3 Drugs affecting the Immune Response
Under specialist supervision only.

Ciclosporin (RED)
Methotrexate (RED)
Azathioprine (Unlicensed) (RED)
Mycophenolate (Unlicensed) (RED)
Hydroxy carbamide (Unlicensed) (RED)
Leflunomide (unlicensed) (RED)
Dapsone (RED)
Hydroxychloroquine (RED)
Mepacrine (RED)
Chloroquine (RED)
Mesalazine (RED)
Colchicine (RED)
Thalidomide (RED)
I.V. Immunoglobulin (RED)
Sirolimus oral solution (unlicensed) (RED)

Biologicals: (RED)
Etanercept (NICE TA103)
Infliximab (NICE TA134)
Adalimumab (NICE TA146)
Ustekinumab (NICE TA180)

13.6 Acne and Rosacea

13.6.1 Topical preparations for acne

- For mild and moderate acne a topical preparation is recommended. If topical preparations prove inadequate, oral preparations may be needed.
- Topical treatment takes at least one month to become effective.
- Topical antibiotics may be as effective as oral antibiotics but encourage resistance and are more expensive.

Benzoyl peroxide & azelaic acid
Benzoyl peroxide (PanOxyl®) £
Azelaic acid (Skinoren®) cream 20%

Topical antibacterials for acne
Benzyl peroxide 5% & clindamycin 1% gel (Duac Once Daily®)
Clindamycin 1% aqueous lotion (DalacinT®)
Erythromycin 40mg & zinc acetate 12mg/ml topical solution (Zineryt®)

Topical retinoids and related preparations for acne
Adapalene (Differin®) cream, gel 0.1%
Tretinoin (Retin-A®) gel 0.01%, 0.025%
Isotretinoin 0.05% gel (Isotrex®)
Isotretinoin 0.05%, erythromycin 2% gel (Isotrexin ®)
Other topical preparations for acne
Nicotinamide 4% gel (Nicam®)

Preparations for rosacea
Metronidazole (Rosex®) cream 0.75%

13.6.2 Oral preparations for acne

Oral antibacterials for acne
First choice; Oxytetracycline tablets (dose: 500mg twice daily)
Second choice; Clarithromycin tablets (dose: 250mg twice a daily)

Hormone treatment for women with acne
Co-cyprindiol tablets (Dianette®) (cyproterone 2mg & ethinylestradiol 35mcg) (Prescribe generically)
In those who do not require contraception, Dianette should be withdrawn 3-4 cycles after the treated condition has completely resolved. If ongoing contraception is required, substitution with another COC is likely to maintain the improvement.

Consultant only
Severe acne, acne unresponsive to prolonged courses of oral antibiotics, scarring, or acne associated with psychological problems calls for early referral to a consultant dermatologist.

Isotretinoin capsules (RED)
Trimethoprim tablets - (unlicensed) (GREEN)
Cyproterone (Androcur) – (unlicensed)

Minocycline MR – contra-indication to isotretinoin, impairment renal function or to treat inflammatory dermatoses.

13.7 Preparations for warts and calluses

Warts may regress on their own and treatment is required only if the warts are painful, unsightly, persistent, or cause distress.

First choice;
Salactol® paint (contains salicylic acid 16.7%, lactic acid 16.7% in colloidon)
Silver Nitrate caustic pencil (Avoca®)
Second choice;
Formaldehyde 0.75% gel (Veracur®)
PCT Only:
Salicylic acid 50% ointment (Verrugon®)
Salicylic acid 26% polyacrylic solution (Occlusal®)
Glutaraldehyde 10% solution (Glutarol®)

**Consultant initiation only - Anogenital warts**

Treatment should be accompanied by screening for sexually transmitted infections.
Imiquimod 5% cream (Aldara®) (GREEN)
Podophyllotoxin 0.15% cream (Warticon®) (GREEN)

**Consultant only:**
Topical 5-Fluorouracil cream (GREEN)
Podophyllotoxin 0.5% solution (Warticon®) (AMBER)
Diphencypropenone immunotherapy (AMBER)
Cantharone (unlicensed) (AMBER)
MCA and TCA (mono/trichloracetic acid) (AMBER)

### 13.8 Sunscreens and camouflagers

#### 13.8.1 Sunscreen preparations
- See BNF for the list of clinical conditions & endorse prescription ACBS

Uvistat cream SPF 30, 50
Sunsense Ultra SPF 50+

**Photodamage**
Superficial lesions in mild actinic keratosis
Ingenol (Picato)
Diclofenac gel (Solaraze)

**Consultant initiation only**
Superficial malignant and pre-malignant skin lesions
Fluorouracil cream 5% (Efudix)

**Consultant only – Hospital only**
Photodynamic therapy with Aminolaevulinic acid - Metvix Cream 2g

#### 13.8.2 Camouflagers - Camouflage Expert initiated
- Prescriptions should be endorsed 'ACBS'

Covermark® Classic foundation, finishing powder
Dermacolor® Camouflage crème, fixing powder
Keromask® Masking cream, finishing powder
13.9 Shampoos and other preparations for scalp and hair conditions

Capasal shampoo
Meted shampoo
Nizoral shampoo
Selsun shampoo
Polytar
Alphosyl 2in1 shampoo
Ceanel Concentrate shampoo
Dermax shampoo

13.10 Anti-infective skin preparations

13.10.1 Antibacterial preparations

13.10.1.1 Antibacterial preparations only used topically
To reduce the development of resistance it is advisable to limit the choice of antibiotic used topically to one not used systemically. Whenever possible, swabs for bacterial examination should be taken before treatment is started. Mupirocin is generally restricted to use in wounds that are MRSA positive.

- Mupirocin 2% (Bactroban®) ointment / nasal ointment
- Silver sulphadiazine 1% (Flamazine®) cream
- Chlorhexidine 0.1% (Naseptin®)

13.10.1.2 Antibacterial preparations also used systemically

- It is generally advised that topical antimicrobials are not used. The exceptions to this are the use of metronidazole topically for acne rosacea (metronidazole 0.75%), and in the management of malodorous wounds (metronidazole 0.8%).
- Topical fusidic acid should be reserved for impetigo where there are very localised lesions only.
- In the presence of visible or proven infection, systemic antibiotics are to be used. See antimicrobial guidelines.

- Fusidic acid 2% (Fucidin®) cream, ointment [see recommendations above]
- Metronidazole 0.75% gel (Anabact®) [see recommendations above]
- Crystacide cream - Consultant Dermatologist Advice only
13.10.2 Antifungal preparations

- Local therapy is used when extent of infection is limited, it should be continued for 1-2 weeks after disappearance of all signs of infection.
- Systemic therapy is required for nail or scalp infection or if skin infection is widespread, disseminated or intractable. Skin scrapings, hair or nail clippings should be examined before systemic treatment is started.
- Oropharyngeal fungal preparations see section 12.3.2

Clotrimazole cream 1%
Miconazole cream 2%
Terbinafine cream 1%

For infected nails
Amorolfine nail lacquer 5% (Loceryl®)

Oral antifungals
Terbinafine tablets
Itraconazole
Grisefulvin
Fluconazole

Consultant initiation only:
Ketoconazole 2% cream (GREEN)
Econazole nitrate 1% cream (GREEN)
Tioconazole 28% cutaneous solution (GREEN)

13.10.3 Antiviral preparations
Indicated for treatment of labial and genital herpes simplex infections.
Aciclovir cream 5%
Aciclovir tablets - Systemic treatment is necessary for buccal or vaginal infections or for herpes zoster (shingles)

Consultant initiation only:
Famciclovir
Valaciclovir
13.10.4 Parasiticidal preparations

**Headlince**
Only treat those with living, moving lice present.

**First Line**
Dimeticone lotion 4%, aqueous
Leave on for 8hrs or overnight. Apply twice with 7 days between applications.
Suitable for all ages, those with asthma and those with skin problems.
Can not be purchased over-the-counter for children under six months.

**Second line**
Wet combing using the Bug Buster® comb and method.
Suitable for all ages, those with asthma and those with skin problems.
Reusable
Or
Malathion 0.5% aqueous liquid (Derbac-M®)
Leave on for 12hrs or overnight. Apply twice with 7 days between applications.
Suitable for asthmatics and those with skin conditions.
Or
Isopropyl myristate and cyclomethicone (Full Marks Solution®)
Leave on for 10minutes. Apply twice with 7 days between applications.
Suitable for those with asthma
Not suitable for children under two years old, during pregnancy or breastfeeding or those with skin problems.

**Scabies**
Simultaneously (within 24hrs) treat all members of the household, close contacts, and sexual contacts with a topical insecticide, even in absence of symptoms.
Machine wash at 50°C or above all clothes, towels and bed linen on the day of the first treatment. Advise to avoid close body contact with others until their partners and close contacts have been treated.

**First line**
Permethrin 5% dermal cream
Apply twice leaving 7 days between applications.

**Second line**
Malathion 0.5% aqueous liquid if permethrin is unsuitable (e.g patient has an allergy to crysanthemums)
Apply twice leaving 7 days between applications.

**Pubic lice**
Consider referral to GUM and screening for STIs if appropriate.
Advise to avoid close body contact until the infestation has been treated.
Partners from the previous 3 months should be examined for pubic lice and treated if necessary.

**First line**
Malathion 0.5% aqueous lotion
Suitable for all unless previous treatment has been unsuccessful.

**Second line**
Permethrin 5% dermal cream.
Suitable for those over 18yrs of age unless pregnant or breastfeeding or previous treatment has been unsuccessful.

13.10.5 Preparations for minor cuts and abrasions

Skin tissue adhesive
Applied by appropriately trained healthcare professionals. Skin tissue adhesives may cause skin sensitisation.

**First choice:**
LiquiBand

**Second choice:**
Indermil

13.11 Skin cleansers, antiseptics and preparations for promotion of wound healing

13.11.1 Alcohols and saline
Suitable for general cleansing of skin and wounds
Sodium chloride 0.9% solution sachets (Irripod®, Normasol®)

13.11.2 Chlorhexidine salts
Suitable for disinfection of the skin
Chlorhexidine cleansing solution (Hibiscrub®)

13.11.4 Iodine
Suitable for disinfection of the skin but may produce systemic adverse effects, such as metabolic acidosis, hypernatraemia and renal impairment, if applied to large wounds or severe burns.
Povidone-iodine Alcoholic 10%,
- Antiseptic solution 10%,
- Dry powder spray 2.5%,
- Surgical scrub 7.5%
13.11.5 Phenolics
Used as part of MRSA regimen
First choice; Octenisan® skin cleanser

13.11.6 Oxidisers and dyes
Cleansing and deodorising suppurating eczematous reactions and wounds;
Hydrogen peroxide solution BP 6%
Hydrogen peroxide 1% cream (Crystacide®)
Potassium permanganate 400mg solution tablets (Permitabs®)

13.12 Antiperspirants
A potent antiperspirant used in the treatment of hyperhidrosis.

Aluminium chloride hexahydrate 20% solution (Anhydrol® forte)

Consultant Only:
- Glycopyrronium bromide 1% may be prescribed on the recommendation of a specialist in cetamacrogol A cream (extemporaneous preparation) or in distilled water for iontophoresis
- Botulinum toxin may be prescribed and administered by specialists for axillary hyperhidrosis.
- Oxybutynin and propantheline may be used as oral preparations once initiated by consultant.

Miscellaneous – Consultant only Hospital only

Allergy patch tests – for dermatology use only

Tretinoin Bleaching Cream (Extemporaneous preparation) – Lthtr and Manchester skin formula’s available. The prescription should state which one to use.

For Dissecting Cellulitis of Scalp
Oral Rifampicin 300mg bd and Clindamycin 300mg bd

For subungual (onycholytic) pseudomonal nailbed infection:
Ciprofloxacin ‘eye’ drops
- Naltrexone - use for uraemic itch
- Clofazimine 100mg – for granulomatous cheilitis
- Sulphamethoxypyridazine 500mg – for pemphigoid, dermatitis herpetiformis
- Ivermectin - selected cases of resistant scabies and larva migrans
- Albendazole - selected cases of larva migrans
- Axsain Cream - Neuralgic pain and pruritus
- Nicotinamide 50mg - adjunctive immunomodulatory used in immunobullous disorders (pemphigoid etc) and pyoderma.