

STANDARD TREATMENT WORKFLOW (STW)

Rational Use of Topical Medications

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Standard Treatment Workflow (STW)

RATIONAL USE OF TOPICAL MEDICATIONS

TOPICAL CORTICOSTEROIDS (TCS)



- Most commonly prescribed topical medication in dermatology
- Because of quick results, it has high abuse potential
- Unmonitored use can cause both local and systemic adverse effects

GENERAL PRINCIPLES FOR TCS USE

- Before prescribing, make sure the dermatosis is steroid responsive
- Rule out fungal and bacterial infections at the local site
- Super potent and potent TCS usually, for a maximum duration of 2 weeks
- For children and over face- only low potency TCS
- For larger surface area, use finger tip unit (FTU) method for application of TCS
- For use over smaller area, less than 1 FTU maybe required; advise not to apply beyond the lesion


COMMON TOPICAL FORMULATIONS AND THEIR USAGE	
Topical formulation	Key aspects of usage
Cream	Emulsion of oil and water; preferred for oozy/wet lesions
Ointment	Semi-solid, greasy, occlusive; preferred for better penetration, especially over thick keratotic lesions
Gel	Aqueous or alcoholic monophasic emulsion Liquefies upon contact with skin Preferred for greater cosmetic acceptance, and hairy areas
Lotion	Usually thicker than a solution and likely to contain oil/water/alcohol Use lotions over hairy areas and larger body surface areas
Aerosol foam/spray	A solution with pressurized propellant; alternative to lotion
Powder	Solid, for example, talc/corn starch; doubtful penetration/efficacy

DOSE AND AMOUNT

- Educate the patient about the optimum quantity (in grams) of TCS required
- A single application to the whole body of an adult will require 20 to 30 g of product (cream/ointment/lotion)
- An area of one hand (palm and digits) will require 0.3 g per application
- No more than 45 g/week of potent or 100 g/week of a moderately potent TCS should be applied
- Treatment under occlusion should be avoided; only prescribed by specialists

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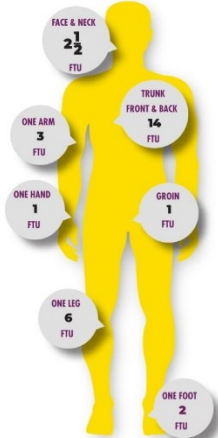
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FINGERTIP UNIT (FTU) METHOD FOR WIDESPREAD ECZEMA

- Open the tube of medication
- Extend your index finger facing up
- Squeeze out a line of medication from the tip of your finger to the first skin crease. This is one fingertip unit (see below)
- Apply the medication or the affected area



The figure shows the number of FTUs required for different areas of the body


FEW ACCEPTABLE COMBINATIONS WITH TCS

Should be used only in specific situations and under strict supervision

- TCS+ Fusidic acid 2% cream/ointment (for impetiginized eczematous lesions)
- TCS + Salicylic Acid (3-6%) ointment (for thick hyperkeratotic eczema/psoriasis)
- Topical Calcipotriene-TCS (for mild to moderate psoriasis)
- Hydroquinone 2% + Tretinoin 0.025% + Fluocinolone Acetonide 0.1% Cream (use with great caution in melasma – high abuse potential)



TCS 'damaged' face



TCS induced striae

RATIONAL TOPICAL COMBINATIONS FOR ACNE

- Clindamycin 1%+Tretinoin 0.025% gel
- Adapalene 0.1% +Clindamycin phosphate 1%
- Clindamycin 1% + Benzoyl peroxide 5% cream
- Adapalene 0.1% + Benzoyl peroxide 2.5% gel

GENERAL PRINCIPLES FOR TOPICAL ANTIBIOTIC USE IN ACNE

- Benzoyl peroxide (BPO) alone, or in combinations with Retinoids/ Clindamycin are effective for mild acne, or in conjunction with a topical retinoid, or systemic antibiotic therapy for moderate to severe acne
- BPO is effective in the prevention of bacterial resistance and is recommended for patients on topical or systemic antibiotic therapy
- Topical antibiotics like Clindamycin are effective acne treatments, but are not recommended as monotherapy because of the risk of bacterial resistance

MOISTURIZERS

- One of the most commonly applied topical preparations for normal skin care and in diseased skin to improve barrier function of skin
- Moisturizer alone are therapeutic in conditions like eczema and psoriasis
- Bland, fragrance-free moisturizer should be preferred
- Moisturizers in common use – white soft paraffin/light liquid paraffin, glycerin with water, coconut oil

GENERAL PRINCIPLES FOR TOPICAL SUNSCREEN USE

- For photosensitive dermatoses like lupus erythematosus, liberal uniform film of sunscreen (2 mg/cm²) should be applied on sun-exposed sites, and application should be at least 15 minutes before sun exposure
- Routine topical sunscreen use is not essential except in special situations with intense, prolonged sun exposure, such as mountaineering

TOPICAL STEROIDS ARE A DOUBLE EDGED SWORD - USE JUDICIOUSLY

This STW has been prepared by national experts of India with feasibility considerations for various levels of healthcare system in the country. These broad guidelines are advisory, and are based on expert opinions and available scientific evidence. There may be variations in the management of an individual patient based on his/her specific condition, as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the website of DHR for more information: (www.icmr.org.in) for more information.
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