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

**COMMON TOPICAL FORMULATIONS AND THEIR USAGE**

<table>
<thead>
<tr>
<th>Topical formulation</th>
<th>Key aspects of usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cream</td>
<td>Emulsion of oil and water; preferred for oozing/wet lesions</td>
</tr>
<tr>
<td>Ointment</td>
<td>Semi-solid, greasy, occlusive; preferred for better penetration, especially over thick keratotic lesions</td>
</tr>
<tr>
<td>Gel</td>
<td>Aqueous or alcoholic monophase emulsion; liquefies upon contact with skin; preferred for greater cosmetic acceptance, and hairy areas</td>
</tr>
<tr>
<td>Lotion</td>
<td>Usually thinner than a solution and likely to contain oil/water/alcohol mixture; used on hairy areas and larger body surface areas</td>
</tr>
<tr>
<td>Aerosol foam/spray</td>
<td>A solution with pressurized propellant; alternative to lotion</td>
</tr>
<tr>
<td>Powder</td>
<td>Solid, for example, talc/corn starch; doubtful penetration efficacy</td>
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</table>

**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 35 gm of product (cream/ointment/lotions)
- An area of one hand (palms and digits) will require 0.3 gm per application
- No more than 45 gm/week of potent or 100 gm/week of a moderately potent TCS should be applied
- Treatment under occlusion should be avoided only prescribed by specialists
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<td>Solid; for example, tars; should only be used for localized disease; use sparingly</td>
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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/vehicle)
- An area of one hand (palm and digits) will require 0.3 g per application
- No more than 40 g weekly of potent TCS should be applied
- Treatment under occlusion should be avoided; only prescribed by specialists

FEW ACCEPTABLE COMBINATIONS WITH TCS

Should be used only in specific situations and under strict supervision
- TCS + Fusidic acid 2% cream/ointment (for impetiginized dermatoses)
- TCS + Salicylic Acid (3-5%) ointment (for thick keratotic dermatoses)
- Topical Calcipotriene-TCS (for mild to moderate psoriasis)
- Hydroquinone 2% + Tretinoin 0.025% + Fluticasone Azone 0.1% Cream (use with great caution in melasma - high abuse potential)

FINGERTIP UNIT (FTU) METHOD FOR WEAKSPOT ECZEMA

1. Open the tube of medication
2. Extend your index finger facing up
3. Squeeze out a line of medication from the tip of your finger to the first skin crease. This is one fingertip unit (see below)
4. The figure shows the number of FTUs required for different areas of the body

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

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 local scientific evidence. They may differ according to the specific condition, as decided by the treating physician. There will be varied merit in direct or indirect consequences. Kindly visit the website of MoF for more information (mof.gov.in) for more information.

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S96