Corticosteroids for Skin Conditions: What every clinician needs to Know

MARGARET A. BOBONICH, DNP, DCNP, FNP-C, FAANP
ASSISTANT PROFESSOR, FRANCES PAYNE BOLTON SCHOOL OF NURSING & CWRU SCHOOL OF MEDICINE
UNIVERSITY HOSPITALS CASE MEDICAL CENTER
EMAIL: MARGARET.BOBONICH@UHHOSPITALS.ORG
Disclosure

- Lilly
- AbbVie
- Sun
Objectives

1. Describe the pharmacodynamics of corticosteroids.
2. Discuss important concepts in selecting appropriate agents to optimize patient outcomes and minimize risks, side effects and complications.
3. Review three case studies of dermatologic conditions and selection of corticosteroid therapies.
Topical Glucocorticosteroids (TCS)

- Usually short-term tx for dermatoses
- Salzberger & Witten (1952)
- Effect vs side effects vs phobia
- Indications (vague)
  - Anti-inflammatory
  - Anti-pruritic
  - Vasoconstriction
## TCS: Indications

<table>
<thead>
<tr>
<th>High potency (I to III)</th>
<th>Medium potency (IV and V)</th>
<th>Low potency (VI and VII)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alopecia areata</td>
<td>Asteatotic eczema</td>
<td>Eyelid dermatitis</td>
</tr>
<tr>
<td>Atopic dermatitis (resistant)</td>
<td>Stasis dermatitis</td>
<td>Diaper dermatitis</td>
</tr>
<tr>
<td>Discoid lupus</td>
<td>Nummular eczema</td>
<td>Psoriasis</td>
</tr>
<tr>
<td>Lichen planks</td>
<td></td>
<td>Hand dermatitis (severe)</td>
</tr>
<tr>
<td>Nummular eczema</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lichen sclerosis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TCS: Mechanism of Action

- Anti-inflammatory effects epidermis
- Anti-proliferative actions epidermis & dermis
TCS: Percutaneous absorption
- Vehicle
- Potency or concentration (vehicle can affect potency)
- Frequency
- Location
- Duration
- Occlusion
- Quality of barrier
- Hydration ↑
- Temperature environment or body ↑
TCS: Choice of Vehicle

Most alcohol:
- Foams
- Gels
- Lotions
- Creams

Least alcohol:
- Creams
- Ointment

Most irritating:

Least irritating:
TCS: Selection of potency

- Vasoconstriction assays & comparative clinical trials
- Duration of inflammatory condition
  - Acute
  - Chronic
- Location
  - Face, intertriginous and genitals- low (2wks)
  - Palms/soles- high/super high
- Age- Infants & elderly
- Condition
- Quality of barrier
- Exceptions
Hypothalamic-pituitary adrenal axis suppression (HPA)

- Can occur with any TCS
- Increases with steroid absorption
- TCS under occlusion
- Higher concentrations of TCS
- Application over large surface areas
TCS: Alternatives

- Calcineurin inhibitors
  - Pimecrolimus 1% (Elidel)
  - Tacrolimus 0.1 and 0.03% (Protopic)

- PDE4 inhibitors
  - Crisaborole 2% (Eucrisa)
Pearls for prescribing TCS

- Control/monitor QUANTITY and REFILLS
- Written instructions: how, when, and when to stop
- Advise patients NOT to share
- Request the pharmacist label the tube not the box
- Avoid combination products
- Rotational therapy
- If not responsive (2 weeks) RETHINK diagnosis
- Contraindicated in skin with infection, patients with perioral dermatitis, acne or rosacea

Acute
SHORT courses of HIGH potency

Chronic
Treat with LOW potency
Intermittent better than continuous
# Topicals Corticosteroids

<table>
<thead>
<tr>
<th>Category</th>
<th>Potency</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 1</td>
<td>Super Potency</td>
<td>Clobetasol 0.05%</td>
</tr>
<tr>
<td>Class 2</td>
<td>High Potency</td>
<td></td>
</tr>
<tr>
<td>Class 3</td>
<td>Upper Mid-Potency</td>
<td>Fluocinonide 0.05%</td>
</tr>
<tr>
<td>Class 4</td>
<td>Moderate Mid-Potency</td>
<td>Triamcinolone 0.1%</td>
</tr>
<tr>
<td>Class 5</td>
<td>Lower Mid-Potency</td>
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</tr>
<tr>
<td>Class 6</td>
<td>Mild Potency</td>
<td>Desonide 0.05%</td>
</tr>
<tr>
<td>Class 7</td>
<td>Least Potency</td>
<td>Hydrocortisone 2.5%</td>
</tr>
</tbody>
</table>

Desoximetasone 0.25% cr or 0.05% cr are free of propylene glycol **

PEARL: Remember a couple from each category

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Dispensing for BID dosing for 2 weeks

<table>
<thead>
<tr>
<th>Location</th>
<th>Adult Dosage</th>
<th>Child Tube size</th>
<th>Infant Tube size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>gms</td>
<td>FTUs</td>
<td>(gm)</td>
</tr>
<tr>
<td>Entire face &amp; neck</td>
<td>35</td>
<td>2.5</td>
<td>15</td>
</tr>
<tr>
<td>One entire hand</td>
<td>14</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Entire foot (not both)</td>
<td>28</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>One entire arm</td>
<td>42</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>One leg</td>
<td>84</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>Entire body</td>
<td>30gm for one application</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Rule of thumb: Children = \( \frac{1}{2} \) adult amount; Infants (6-12 months) = \( \frac{1}{4} \) adult amount

Rule of hands: Area equal to 2 adult hands (palm & fingers) = 1 FTU

1 Finger tip unit (FTU) = 0.5 gm
## FDA approved TCS in children

<table>
<thead>
<tr>
<th>Class</th>
<th>Generic Name</th>
<th>Age Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUPER</td>
<td>Clobetasol propionate 0.05% foam</td>
<td>&gt; 12 years</td>
</tr>
<tr>
<td>HIGH</td>
<td>Fluocinonide 0.1% cream</td>
<td>&gt; 12 years</td>
</tr>
<tr>
<td>MED</td>
<td>Mometasone 0.1% cream/ointment</td>
<td>&gt; 2 years</td>
</tr>
<tr>
<td></td>
<td>Fluticasone 0.05% lotion/cream</td>
<td>&gt; 1 year</td>
</tr>
<tr>
<td>LOW</td>
<td>Alclometasone 0.05% cream/ointment</td>
<td>&gt; 1 year</td>
</tr>
<tr>
<td></td>
<td>Prednicarbate 0.1% cream/ointment</td>
<td>&gt; 1 year</td>
</tr>
<tr>
<td></td>
<td>Fluocinolone acetonide 0.01% in peanut oil</td>
<td>&gt; 3 months</td>
</tr>
<tr>
<td></td>
<td>Desonide 0.05% hydrogel</td>
<td>&gt; 3 months</td>
</tr>
<tr>
<td></td>
<td>Hydrocortisone butyrate 0.1% cream</td>
<td>&gt; 3 months</td>
</tr>
</tbody>
</table>

Corticosteroids in pregnancy & lactation

- Limited data on safety
- Emollient therapy first
- Topicals preferred over systemic
- Mild to moderate potency
- Potential risk: premature rupture of membranes, interuterine growth restriction, gestational DM, osteoporosis, infection and pregnancy-induced hypertension
- Avoid during first trimester if possible
- Lactating women tx >20mg/d can discard breast milk for 4 hrs following dose


Cutaneous/localized side effects

- Atrophy
- Bruising, purpura, skin fragility, striae, telangiectasia, pigment abnormality
- Irritation
- Infections (secondary)
- Dermatitis
- Delayed wound healing
- Photosensitization
- Steroid-induced acne & rosacea
- Rebound phenomenon
- Tachyphylaxis

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Systemic side effects*

Ocular
Endocrine
Metabolic
Renal & cardiovascular
Misc

*Usually seen in extended use of high potency.
Pearls to reduce steroid side effects

- Use potent steroid to gain QUICK control of disease
- Reduce to less potent
- Taper instead of abrupt cessation
- Reduce frequency (alternate days, weekend, etc.)
- Can use other non-steroid topicals to reduce dependency
- Use caution on flexural surfaces, face, genitals and intertriginous
- Avoid occlusion
- Use of other topical agents (keratolytics, moisturizers, etc.)
- Avoid combination products
Successful use of topical corticosteroids depends on the **correct diagnosis**
Atopic Dermatitis

- “Out of place” or strange
- Atopic march
- Most common type of eczema
- “infantile eczema”, “atopic eczema”
- 60% cases 1st year, 95% before 4 yrs old

Must have three of the following:

1. Pruritus
2. Typical morphology and distribution
3. Chronically relapsing dermatitis
4. PMH or FHx atopic disease
Therapeutic approach

- Control the environment
- Emollients (jars & tubes)
- Moisturizers
- Topical corticosteroids
- Topical non-corticosteroids
- Antihistamines
Topical corticosteroids or antimicrobials?
Stasis dermatitis

Frequently in presence of venous insufficiency
- Pruritus
- Eczema
- Hemosiderin staining
- Ankle (medial) involvement
- Varicosities
- Edema

Can develop into:
Secondary infection, cellulitis, ulcers,

Most frequent cause for patients admitted unnecessarily w/misdiagnosis of cellulitis

Stasis Dermatitis

- Assess underlying etiology
- Topical CCS (Una boot if wet)
- Assess for infection or ulceration
- Compression and elevation
Beyond topical steroids

- Large body surface areas
- Underlying systemic disease
- Recalcitrant or severe disease
- Thick lesions
- Significant impact QOL
- Consider comorbidities
- Oral, intramuscular, intralesional intravenous
- Steroid sparing agents & therapies
## Comparison of Oral and Intramuscular Corticosteroids

<table>
<thead>
<tr>
<th></th>
<th>Oral</th>
<th>Intramuscular</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Absorption</strong></td>
<td>Predictable</td>
<td>Variable</td>
</tr>
<tr>
<td><strong>Compliance</strong></td>
<td>Relies on patient</td>
<td>Total dose administered</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>Any time period</td>
<td>Select short, intermediate or long-acting</td>
</tr>
<tr>
<td><strong>Patient Health</strong></td>
<td>Req. functional GI tract</td>
<td>Not affected by N/V</td>
</tr>
<tr>
<td><strong>Patient's Role</strong></td>
<td>Active control/participation</td>
<td>No role or control</td>
</tr>
<tr>
<td><strong>Clinician's Role</strong></td>
<td>Prescribe and monitor</td>
<td>Assured of delivery from IM</td>
</tr>
<tr>
<td><strong>Diurnal Variation</strong></td>
<td>Some with AM dosing</td>
<td>No diurnal variation</td>
</tr>
<tr>
<td><strong>Tapering</strong></td>
<td>Precise</td>
<td>Based on metabolism</td>
</tr>
</tbody>
</table>

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Intramuscular CCS

- Systemic side effects including effect on HPA axis
- Suppression noted up to 3-4 wks after injection of triamcinalone
- Can cause anovulatory menstrual cycles
- KEY: not the dose but the interval BETWEEN doses that has the greatest effect on HPA axis
- Lower dose q2-4 wk interval had greater suppression than higher dose q 6 week intervals

Intramuscular CCS

Summary (Wolverton, 2012)

- There are rare SEs with a single IM of CCS.
- Focus should be on disease triggers and use of topicals to avoid additional oral or systemic.
- When more than one injection is needed:
  - Short-to-intermediate-acting CCS (Celstone or Aristocort) for repeated IMs
  - Long-acting CCS limited to 3-4 times a year

Complications: abscess, SQ atrophy, crystal deposition
Side effects: menstrual irregularities, purpura
Intralesional corticosteroids (CCS) for skin conditions

Indications based on standard for your specialty (literature) .... vague

- Alopecia areata
- Keloids
- Plaques of recalcitrant dermatoses
- Cystic lesions
Side effects intralesional CCS

- Painful
- Hypo- or depigmentation
- Atrophy
- Increased risk of infection
- Fat necrosis

It takes a lot of practice to achieve effective outcomes and minimal side effects.
Oral prednisone

- Corticosteroid of choice for outpatient
- Inactive form, is converted in the liver
- Patients with liver disease should tx with prednisolone
- Little data comparing or recommending
- Daily dosing vs divided doses reserve for severe cases
- Consistent dosing vs Medrol dose pack (incr. risk rebound of disease)
- Tapering is VARIABLE!!!

**EXAMPLE:** Contact derm 40-60mg for 2wk (no taper) or 60mg x 1wk then TAPER taper over 10-14 days
Considerations for systemic corticosteroids

- Dermatology: rare need to long term tx
- Age and weight
- Comorbidities (DM, HTN, PUD, osteoporosis)
- Discontinue NSAIDs
- Systemic infections
- Short term (2-3 wks) vs long term (months)
- Need for Vit D and calcium supplementation
- Biphosphonates if longer than 1 month
- Know hypersensitivities
- Drug interactions
- Frequency of dosing: BID more potent than QD
2017 American College of Rheumatology Guideline for the Prevention and Treatment of Glucocorticoid-Induced Osteoporosis

Lenore Buckley,1 Gordon Guyatt,2 Howard A. Fink,3 Michael Cannon,4 Jennifer Grossman,5 Karen E. Hansen,6 Mary Beth Humphrey,7 Nancy E. Lane,8 Marina Magrey,9 Marc Miller,10 Lake Morrison,11 Madhumathi Rao,12 Angela Byun Robinson,13 Sumona Saha,5 Mary Beth Humphrey,7 Nancy E. Lane,8 Marina Magrey,9 Marc Miller,10 Lake Morrison,11 Madhumathi Rao,12 Angela Byun Robinson,13 Sumona Saha,5 Susan Wolver,14 Raveendhara R. Bannuru,12 Elizaveta Vaysbrot,12 Mikala Osani,12 Marat Turgunbaev,15 Amy S. Miller,15 and Timothy McAlindon12

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Case Study
To treat............. or not to treat?

**Seborrheic dermatitis (seb derm)**

- Aka: cradle cap, dandruff (misdiagnosis of acne in adolescence)
- Unknown etiology but suspect *Pityrosporum (M. furfur)*
- Inflammation and scale
- Clinical presentation varies with age
- Distribution of sebaceous glands
- Flares
Seb Derm

Treatment
Alternating therapies: anti-yeast shampoos, antifungal topicals, TCS, and calcineurin inhibitors (CIs)

Cochran Review (2014)
- TCS and CI’s comparable short-term efficacy & outcomes but fewer SEs with TCS
- Mild vs “strong” TCS comparable outcomes but BETTER total clearance with mild TCS
- TCS has similar outcomes to azoles in the short term

Summary: only minor differences in treatment outcomes and no clear differences between the agents

Combination TCS and antifungals

- Not all dermatitis requires corticosteroids
- Some antifungals have anti-inflammatory effects
Topical agents: superficial fungal infections

- Yeast vs dermatophytes
- Selection based on organism
- Location (skin, hair and nails)
- Vehicle
- Fungistatic vs fungicidal
- Other properties: antimicrobial and anti-inflammatory
- Recurrence
- Prevention
- Systemics
Tinea Corporis

- “Ringworm”
- Very contagious
- *T. rubrum*
- Tx topically or systemically
Tinea cruris

- +/- mixed candida & dermatophytes
- Not common kids
- Tx with topical azoles 2-4 wks
- Oral griseofulvin if severe
- Always check feet!

DDX: intertrigo, contact derm, candidiasis, erythasma, bacterial infection
DDX Tinea cruris

- Unilateral, half-moon
- Spreads peripherally (thigh & perianal)
- Not usually scrotum
“Diaper” candidiasis

- C. albicans 80%
- Marginal scaling
- Beefy red confluent plaques & erosions
- Satellite papules/pustules (*hallmark*)
- Includes skin folds, concave surfaces
- No improvement with barrier creams (zinc oxide, A&D, petrolatum, triple paste)
- KOH preparation or fungal culture ???
- Check oral mucosa & breasts/nipples
- Adult incontinence garments

**Dx of yeast is not always a SLAM DUNK!**
Diaper candidiasis therapies

- Nystatin cream is DOC
  - Imidazoles- not as effective, irritating
  - Allylamines- not as effective
- If severe inflammation- okay to use hydrocortisone 1% ointment for a couple days (LIMITED TIME)
- **May** need tx oral nystatin for oral thrush (mother’s nipples)
- **Refer** if severe and not responsive to tx. Reconsider Dx
- **Never** use combination products
  - Clotrimazole/betamethasone dipropionate/ (Lotrisone)
  - Nystatin/triamcinolone acetonide (Mycolog)
### Indications and Effectiveness of Topical Antifungals

<table>
<thead>
<tr>
<th>Class &amp; Indications</th>
<th>Generic name</th>
<th>Dermatophyte</th>
<th>Yeast</th>
<th>Gram+</th>
<th>Gram -</th>
<th>Anti-inflammatory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Polyenes (fungistatic)</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Candidiasis</td>
<td>Nystatin</td>
<td>0</td>
<td>++++</td>
<td></td>
<td></td>
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<tr>
<td><strong>Azoles (fungistatic)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tinea</td>
<td>Miconazole</td>
<td>+</td>
<td>+++</td>
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<tr>
<td>Pityriasis/tinea versicolor</td>
<td>Clotrimazole</td>
<td>+</td>
<td>+++</td>
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<tr>
<td>Candidiasis</td>
<td>Ketoconazole</td>
<td>+</td>
<td>+++</td>
<td>++</td>
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<tr>
<td>Seborrheic dermatitis</td>
<td>Oxiconazole</td>
<td>+</td>
<td>+++</td>
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<tr>
<td></td>
<td>Econazole</td>
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<td>+++</td>
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<td>Sertaconazole</td>
<td>+</td>
<td>+++</td>
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<td><strong>Allylamines/ Benzylamine (fungicidal)</strong></td>
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<tr>
<td>Tinea</td>
<td>Naftifine</td>
<td>+</td>
<td>+</td>
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<td>+++</td>
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<tr>
<td>Pityriasis/tinea versicolor</td>
<td>Terbinafine</td>
<td>+++</td>
<td>+</td>
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<tr>
<td></td>
<td>Butenafine</td>
<td>++++</td>
<td>++</td>
<td></td>
<td>+++</td>
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<td><strong>Other Agents</strong></td>
<td></td>
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<tr>
<td>Tinea; Onychomycosis; Candidiasis</td>
<td>Ciclopirox</td>
<td>++</td>
<td>++++</td>
<td>C. Albicans</td>
<td>+++</td>
<td>+++</td>
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<tr>
<td>Pityriasis/tinea versicolor; Seborrheic dermatitis</td>
<td>Selenium sulfide</td>
<td></td>
<td>+++</td>
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<td>Pityriasis/tinea versicolor</td>
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<tr>
<td>Seborrheic dermatitis</td>
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</tbody>
</table>

Betamethasone dipropionate/clotrimazole (Lotrisone)

High potency topical corticosteroid

Indications: Tinea cruris or corporis - twice daily for 1 week
Tinea pedis - twice daily for 2 weeks.

Not recommended for children under 17 years old or diaper dermatitis

Clinical pearls treating superficial fungal

- Remember high rate of reinfection
- Maybe secondary infections
- Consider systemics for extensive involvement
- Examine entire body (esp. hands, feet & groin)
- Hair and nails require longer treatment - 6 to 12 wks
- When selecting an agent consider fungistatic and fungicidal
- Social history is very important for dx and tx
- Environmental control is essential
- If not responsive, RETHINK diagnosis
Case study
Psoriasis

- Chronic, immune-mediated skin disease
  - Most common autoimmune disease
  - Correlation between skin and systemic inflammation
- High comorbidity burden
- Affects almost 8 million Americans

Psoriasis Types

- Plaque
- Scalp
- Genital/Inverse
- Nail psoriasis

Photos courtesy of Margaret Bobonich, DNP, FNP-C, DCNP, FAANP. Used with permission.
Disease burden of psoriasis

Types
- Plaque
- Scalp
- Nail
- Genitals
- Arthritis/joints

Severity
- How is it measured?
- Quality of life measures
- Comparison of severity patient vs health care provider
Comorbidities Established in Psoriasis and PsA

- Cardiovascular disease (CVD)
- Metabolic syndrome
- Obesity
- Dyslipidemia
- Diabetes
- Mood disorders
- Inflammatory bowel disease
- Malignancy
- Uveitis
- Alcohol and addictive behaviors

Risk of Cardiometabolic Disease in Severe Psoriasis Patients

Clinical significance:
- Increased risk of MI, stroke, CV death, and DM
- 5 years shorter life expectancy
- 10-year risk of major CV event attributable to psoriasis = 6%
- Risk of CV disease similar patient with diabetes
- Patients with severe psoriasis are 30x more likely to experience MACE (attributable to psoriasis) than to develop a melanoma skin cancer

MI = myocardial infarction, MACE = major adverse cardiac events, RR = relative risk.
## Treatment of Psoriasis

<table>
<thead>
<tr>
<th>Type of treatment</th>
<th>Recommended for</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Topical Therapy</strong> (emollients, corticosteroids, vitamin D analogues, calcipotriene, tazarotene, calcineurin inhibitors, anthralin)</td>
<td><em>Mild disease</em></td>
<td>Limited by poor adherence rates</td>
</tr>
<tr>
<td>Ultraviolet (UV) Light (UVB radiation, narrow-band UVB, photochemotherapy [PUVA])</td>
<td><em>Moderate-to-severe disease</em></td>
<td>Associated with accelerated photodamage and increased risk of malignancy; will not treat PsA</td>
</tr>
<tr>
<td>Methotrexate</td>
<td><em>Moderate-to-severe disease</em></td>
<td>Most widely used systemic treatment; inexpensive; pregnancy category X</td>
</tr>
<tr>
<td>Cyclosporine</td>
<td>Psoriasis flares</td>
<td>Used as a bridging agent during induction of other maintenance agents or for flares</td>
</tr>
<tr>
<td>Acitretin</td>
<td><em>Moderate-to-severe disease</em></td>
<td>Low toxicity and no immunosuppression; can be used in patients with infection, malignancy, or HIV; need to monitor LFTs and triglycerides; contraindicated if considering pregnancy</td>
</tr>
<tr>
<td><strong>Biologic Agents</strong></td>
<td><em>Moderate-to-severe disease</em></td>
<td>May be used as first-line systemic agent depending on comorbidities and other considerations; highly efficacious; expensive</td>
</tr>
</tbody>
</table>

Treatment of Mild-to-Moderate Psoriasis

Up to 80% of psoriasis patients receive no treatment or only topical therapy

Topical therapy

- Corticosteroids, vitamin D derivatives, tazarotene, anthralin, tacrolimus, pimecrolimus, newer tar formulations
- Must be prescribed appropriately and used consistently for weeks to months for clinical improvement
- Potential AEs
  - Cutaneous atrophy
  - Telangiectasias
  - Hypothalamic-pituitary axis suppression

Treatment of Mild-to-Moderate Psoriasis

**Topical therapy** (cont’d)

- Primary limitation is medication adherence
- Strategies to optimize adherence:
  - Consider dosage/schedule, choice of vehicle
    - Fixed-combination gels, foams
  - Address patient preference about treatment
  - Address concerns about treatment-related toxicities
  - Manage patient expectations
- Assess patient response and *know when to refer!*

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Psoriasis management & monitoring

- Refer to dermatology if not controlled
- Refer to dermatology or rheumatology for PsA
- National Psoriasis Foundation (NPF) treatment targets for plaque psoriasis
  - **Acceptable**: Either BSA ≤3% or BSA improvement ≥75% from baseline at 3 months after treatment initiation
  - **Target**: BSA ≤1% at 3 months after treatment initiation
- Monitor *at least* every 3 to 6 months during maintenance therapy
- Reassess if skin symptoms or arthritis not under control

REMEMBER:

- Successful use of TCS depends on the **correct diagnosis**.
- Indications vague
- All brands vs generics are **NOT equal**
- Monitor for secondary infections
- Control risk for side effects and dispensing
- Contraindicated in skin with infection, patients with perioral dermatitis, acne or rosacea
Take home message

- Consider topical therapy for inflammatory conditions
- Treatment must be individualized
- Compare topicals vs systemics
- Consider risk for secondary infections
- Cultures are an important diagnostic tool
- Rethink diagnosis if not responsive in 2 weeks
Objectives

1. Describe the pharmacodynamics of corticosteroids- MOAs
2. Discuss important concepts in selecting appropriate agents to optimize patient outcomes and minimize risks, side effects and complications—indications, duration, variables & routes of administration.
3. Review three case studies of dermatologic conditions and selection of corticosteroid therapies—atopic derm, stasis dermatitis, seborrheic dermatitis and psoriasis.
“The eyes see only what the mind knows”

