Dermatology for Primary Care

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Outline and Learning Goals

1. Identify recommendations for skin cancer screenings
2. Summarize over-the-counter recommendations for dry skin, sun protection, and itch
3. Compare topical steroid types and vehicles and identify appropriate use cases
4. Summarize a Primary Care approach to acne vulgaris
5. Q&A

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Who needs a skin check anyway?

The benefits of a skin check, on one hand…

- National cancer statistics (American Cancer Society, CDC, National Cancer Institute) highlight that **the incidence of melanoma is increasing faster than any other potentially preventable cancer in the US**.[1]

- Observational studies have consistently shown that **melanomas detected by clinicians during a skin examination are thinner** than those found by patients or their significant others.[2]

- The cure rate for most skin cancers is high for noninvasive and early invasive disease, implying that **early detection is paramount**.

And on the other hand…

- Skin cancer screening of the majority of the population is **unlikely to be beneficial, feasible, or cost-effective**.

- Randomized trial data are not available for melanoma screening; 800,000 participants would be required to detect a difference in mortality because of the relatively **low melanoma mortality rate**.[3]

- There are **harms of screening**, including unnecessary biopsies (anxiety, scarring, expense, strain on the health care system) and overdiagnosis (diagnosis of skin cancer that would never become clinically meaningful during the patient's lifetime).

What do the guidelines say?

Population	Recommendation	Grade
Asymptomatic adolescents and adults	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of visual skin examination by a clinician to screen for skin cancer in adolescents and adults. See the Practice Considerations section for additional information regarding the I statement.	I

“If you find a spot on your skin that could be skin cancer, it’s time to see a dermatologist.”

Recommendations

- We suggest targeted screening of groups with relatively high risk:
  - Older age with lighter skin types and significant sun damage
  - > 50 nevi
  - Personal history of skin cancer
  - Chronic immunosuppression (e.g., due to chronic prednisone therapy after organ transplant)
  - Family history of melanoma in a first-degree relative

Recommendations

- We do not recommend screening by a dermatologist for non-high-risk patients (e.g., adults without identified suspicious lesions)
- We suggest that PCPs observe the skin of all patients during routine visits, particularly in areas challenging for patients to self-examine
- We recommend educating patients about melanoma risk factors and appearance and to alert their PCP if they identify suspicious lesions

Pause for questions: skin cancer screening

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General Skin Care Recommendations

- Steal my patient AVS SmartPhrases!
  - Dry skin → .TDXEROSISPT
  - Sun protection → .TDSUNPT
  - Itch → .TDITCHPT

User SmartPhrase – TDXEROSISPT [1204587]

Do not include PHI or patient-specific data in SmartPhrases.

Insert SmartText Insert SmartList

Recommendations for dry skin:

Skin is the body's barrier to the environment. This barrier needs to be well-moisturized to keep it intact and strong—dry skin is more likely to become inflamed, rashy, and open to infection.

Our skin thins as we age, and the body becomes less capable of maintaining the barrier. Routine dry skin care can help keep the skin moisturized, healthy, and youthful.

- Minimize hot water exposure; warm showers are gentler on the skin than hot showers
- Avoid vigorous scrubbing/exfoliating
- After water exposure (e.g., hand washing, showering), gently pat the skin dry and apply moisturizer
  - Fragrance-free moisturizers are preferred
  - Cream moisturizers are preferred over lotions
  - Recommended brands include: Vanicream, CeraVe, Cetaphil, La Roche-Posay
  - Use moisturizer at least twice daily
- Consider use of a home humidifier during dry winter months

User SmartPhrase – TDSUNPT [1204597]

Do not include PHI or patient-specific data in SmartPhrases.

Insert SmartText Insert SmartList

Recommendations for sun protection:

General Tips
- Use a sunscreen at least SPF 30 that provides **broad-spectrum coverage** (covers both UVA and UVB)
- **Reapply sunscreen** every 1.5–2 hours when you are outside
- **Avoid peak hours of sun** from 10 PM and 2 PM (check the UV index)
- Wear a **wide-brimmed hat** and UV-protective clothing (**clothing with UPF**, ultraviolet protection factor)

Sunscreen Types
- **Inorganic (physical) sunscreens**: contain zinc oxide and/or titanium dioxide, which reflect and scatter UV radiation
  - Pros: better for sensitive skin—some people feel like their skin is burning when they put on organic (chemical) sunscreens
  - Cons: can be more expensive, are typically pastier (because they are more difficult to work into the skin and can leave a white film—though there are tinted mineral sunscreens), feel more dry on the skin
- **Organic (chemical) sunscreens**: contain substances that absorb UV radiation, such as oxybenzone and avobenzone
  - Pros: typically cheaper and more widely available
  - Cons: can lead to a burning sensation on sensitive skin, can be damaging to coral reefs

Sunscreens for acne-prone/oily skin and for regular daily use
- EltaMD UV Clear or UV Daily
- Cetaphil Daily Facial Moisturizer with SPF
- CeraVe AM Facial Moisturizing Lotion with Sunscreen
- Neutrogena facial sunscreens

Sunscreens for sensitive skin
- Vanicream Facial Moisturizer Broad Spectrum with SPF
- Neutrogena Pure & Free Baby Sunscreen
- In general, best if the product has only zinc oxide and/or titanium dioxide as active ingredients

Sunscreens that feel lighter on the skin
- EltaMD UV Clear or UV Daily
- La Roche-Posay Anthelios Melt-in Milk
- Neutrogena Hydro Boost with SPF
- Neutrogena Ultra Sheer sunscreens

Dry Skin Care

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- Avoid vigorous scrubbing/exfoliating
- After water exposure (e.g., hand washing, showering), gently pat the skin dry and apply moisturizer
    - Fragrance-free moisturizers are preferred
    - Cream moisturizers are preferred over lotions
    - Recommended brands include: Vanicream, CeraVe, Cetaphil, La Roche-Posay
- Use moisturizer at least twice daily
- Consider use of a home humidifier during dry winter months

Sun Protection

- Sun-protection factor (SPF)
  - Broad-spectrum coverage protects against the two most damaging types of ultraviolet radiation (UVA and UVB)
  - Nearly all sunscreens are broad-spectrum nowadays

- The amount of UVB radiation absorbed by SPF 15, 30, and 50 sunscreen products is 93%, 97%, and 98%, respectively[4]
  - Products with SPF > 50 provide only a negligible increase in protection from UV radiation and are generally thicker and more difficult to work into the skin—and thus are less tolerable!

Sun Protection

- In general, the more expensive brands (e.g., La Roche-Posay, EltaMD) tend to be easier to apply and less greasy—I think they're worth it
- Reapplication of sunscreen every 2 hours is more important than selecting sunscreen with high SPF
- Bottom line:
  - SPF 30 is good enough. It's usually cheaper than higher SPF products and easier to work into the skin—the more tolerable it is, the more likely you are to use it. If you can tolerate SPF > 30, go for it!

Itch care

- Dry skin care for ALL patients
- Address primary dermatologic issues (e.g., atopic dermatitis)
- Tips for OTC topicals:
  - Camphor-menthol (e.g., Sarna lotion)
  - Pramoxine (e.g., CeraVe Itch Relief Moisturizing Cream)
  - **Can refrigerate for added effect**

Pause for questions: dry skin, sun protection, itch

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Topical Steroids

- Don’t be overwhelmed!
- Goals:
  - A **high-potency steroid for select lesions** (e.g., flaring atopic dermatitis)
  - A **medium-potency steroid for broad use** (e.g., diffuse rash on the trunk)
  - A **mild steroid for sensitive areas** (e.g., diffuse rash on the face)
  - A **steroid for the scalp** (e.g., for flaring seborrheic dermatitis)

Topical Steroids

- ☐ alclometasone (ACLOVATE) cream 0.05%
- ☐ augmented betamethasone dipropionate (DIPROLENE) 0.05% lotion
- ☐ BETAMETHASONE DIPROPIONATE 0.05 % EX CREA
- ☐ BETAMETHASONE DIPROPIONATE 0.05 % EX CREA
- ☐ BETAMETHASONE DIPROPIONATE 0.05 % EX LOTN
- ☐ BETAMETHASONE DIPROPIONATE 0.05 % EX LOTN
- ☐ BETAMETHASONE DIPROPIONATE 0.05 % EX OINT
- ☐ BETAMETHASONE DIPROPIONATE 0.05 % EX OINT
- ☐ BETAMETHASONE VALERATE 0.1 % EX CREA
- ☐ BETAMETHASONE VALERATE 0.1 % EX CREA
- ☐ BETAMETHASONE VALERATE 0.1 % EX CREA
- ☐ BETAMETHASONE VALERATE 0.1 %
- ☐ fluocinonide-emollient (LIDEX-E) cream 0.05%
- ☐ fluocinonide-emollient (LIDEX-E) cream 0.05%
- ☐ halobetasol propionate (ULTRAVATE) 0.05% cream
- ☐ halobetasol propionate (ULTRAVATE) 0.05% cream
- ☐ halobetasol propionate (ULTRAVATE) 0.05% ointment
- ☐ halobetasol propionate (ULTRAVATE) 0.05% ointment
- ☐ HALOG 0.1 % EX CREA
- ☐ HALOG 0.1 % EX CREA
- ☐ HALOG 0.1 % EX CREA
- ☐ HALOG 0.1 % EX OINT
- ☐ HALOG 0.1 % EX OINT
- ☐ HALOG 0.1 % EX OINT

Topical Steroids

- Types/strengths
  - Subdivided into seven groups of potency
    - Group 1 = most potent
    - Group 7 = least potent
  - You can essentially ignore %—<u>potency is determined more by steroid type</u> than percentage strength
- Vehicles
  - Ointments, creams, lotions, gels, etc
    - Ointments are more penetrating (more effective) than creams but are greasier and thus less tolerable
    - Creams have preservatives that can sting when applied to sensitive skin

Topical Steroids

High potency	Clobetasol 0.05% ointment, cream
	Augmented betamethasone dipropionate 0.05% ointment, cream
Medium potency	Triamcinolone 0.1% ointment, cream—**available in a 454-g jar!**
	Betamethasone dipropionate 0.05% cream (non-augmented)
	Betamethasone valerate 0.1% cream
Low potency	Hydrocortisone 2.5% ointment, cream
	Desonide 0.05% cream
Scalp	Fluocinonide 0.05% solution
	Clobetasol 0.05% solution, shampoo
	Fluocinolone 0.01% oil

Topical Steroids

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Medium potency	**Triamcinolone 0.1% ointment, cream—available in a 454-g jar!**
	Betamethasone dipropionate 0.05% cream (non-augmented)
	Betamethasone valerate 0.1% cream
Low potency	**Hydrocortisone 2.5% ointment, cream**
	Desonide 0.05% cream
Scalp	**Fluocinonide 0.05% solution**
	Clobetasol 0.05% solution, shampoo
	Fluocinolone 0.01% oil

Topical Steroids

- Risks
  - Adverse effects of overuse: atrophy, telangiectasias, hyperpigmentation, hypopigmentation, striae
  - Atrophy usually only occurs with sustained use (weeks to months) on unaffected skin and resolves within weeks to months if therapy is discontinued as soon as atrophic changes occur
- Frequency/amount:
  - Safe to use up to twice daily for 2–3 weeks/month on average
    - ”2 weeks in a row, then 1 week break; repeat as needed”
    - “use on weekdays; take breaks on weekends”
  - Consider non-steroid topicals (e.g., tacrolimus) when taking breaks for chronic skin conditions

Pause for questions: topical steroids

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Acne vulgaris: general care

- Mild facial cleanser 1–2 times daily (e.g., Vanicream, Cetaphil)
- OTC benzoyl peroxide 4–6% facial wash qAM
  - AEs: dry skin, irritation, and potential bleaching of cloth
- OTC salicylic acid washes, serums
- Avoidance of whey protein (dairy, protein supplements)

Acne vulgaris: mild

- Clindamycin 1% lotion daily
- OTC adapalene 0.1% gel vs tretinoin 0.025% cream qHS
    - Thin layer to entire face
    - Reduce skin irritation and dryness by starting every third night, with dilution with cream as needed, then increase to nightly as tolerated
    - Patients who are pregnant or planning pregnancy should not use this medication
    - Protect skin from the sun

Acne vulgaris: moderate

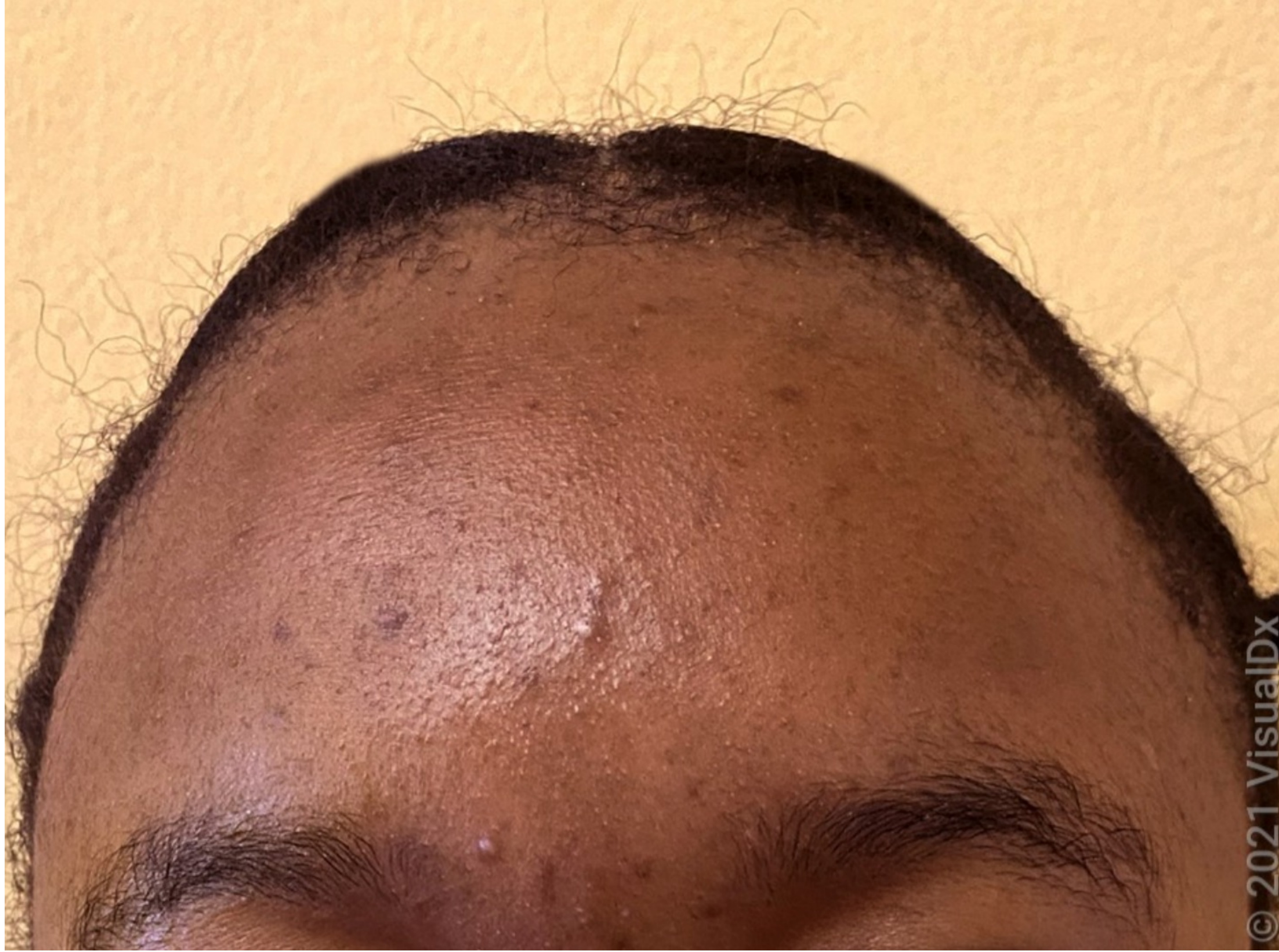
- Increase tretinoin strength 0.025% → 0.05% → 0.1% if tolerating
- Oral tetracycline
  - Doxycycline 100 mg BID x 3 months → 100 mg daily x 3 months → stop
    - AEs: nausea, esophagitis, photosensitivity; take medication with food and water, do not lie down within 1 hour of taking the medication, protect skin from the sun
- For female patients
  - Spironolactone 50 mg daily x 2 weeks → 100 mg daily if tolerating
    - AEs: hypotension, dizziness, polyuria, teratogenicity, breast tenderness, and dysmenorrhea; no need to check renal function/potassium in healthy patients
  - Combined oral contraceptives containing both estrogen and progestin

Acne vulgaris: severe

- Isotretinoin

Other options

- Subantimicrobial doxycycline
- Azelaic acid
- Glycolic acid
- Oral and topical macrolides
- Topical clascosterone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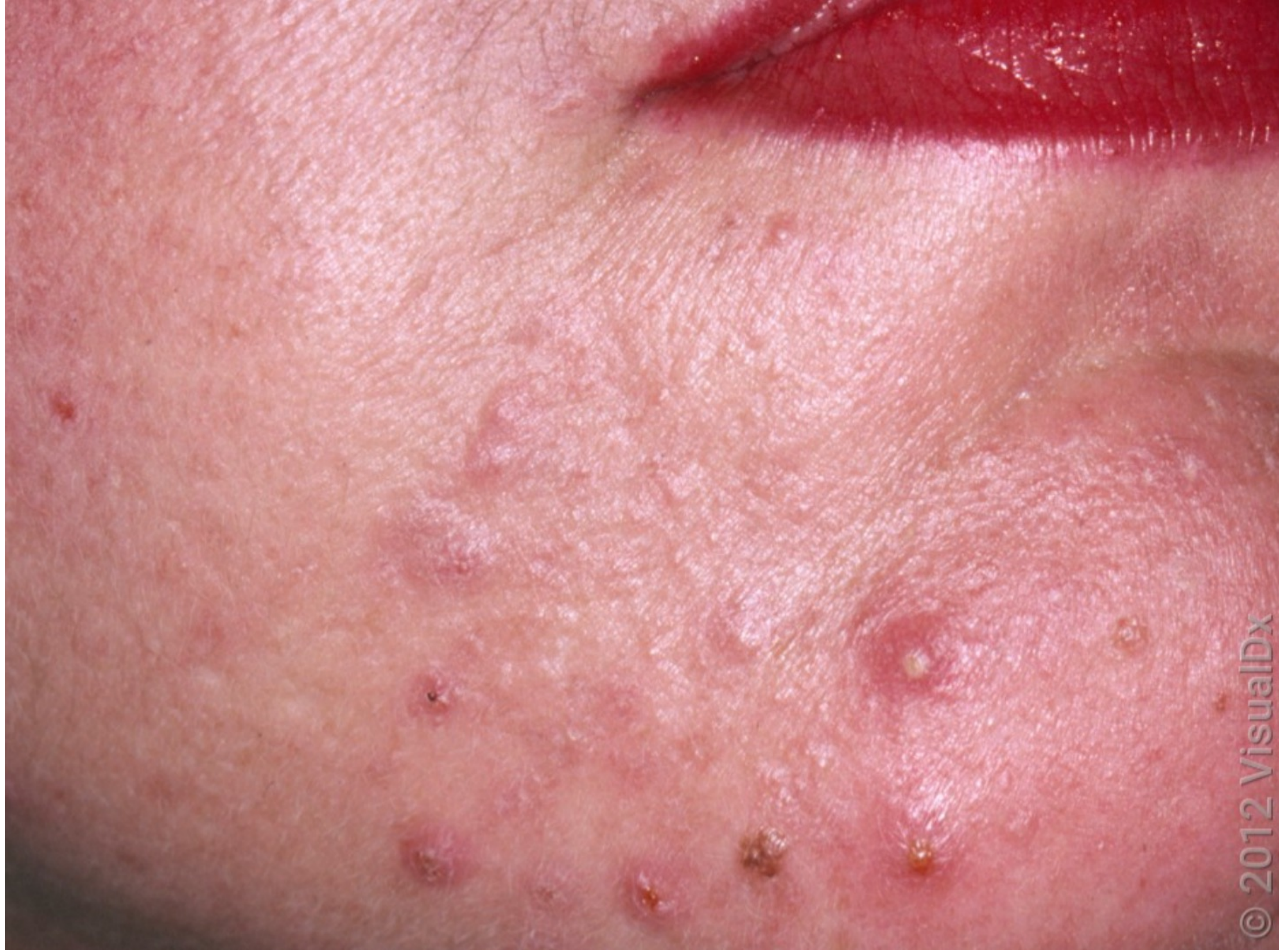
Acne vulgaris, mild

- Start **OTC facial cleanser** 1–2 times daily (e.g., Vanicream, Cetaphil)
- Start **OTC benzoyl peroxide 4–6%** facial wash qAM; counseled regarding dry skin, irritation, and potential bleaching of cloth
- Start **clindamycin 1% lotion** daily
- Start **tretinoin 0.025% cream** qHS, thin layer to entire face; counseled to reduce skin irritation and dryness by starting every third night, with dilution with cream as needed, then increase to nightly as tolerated; patients who are pregnant or planning pregnancy should not use this medication; protect skin from the sun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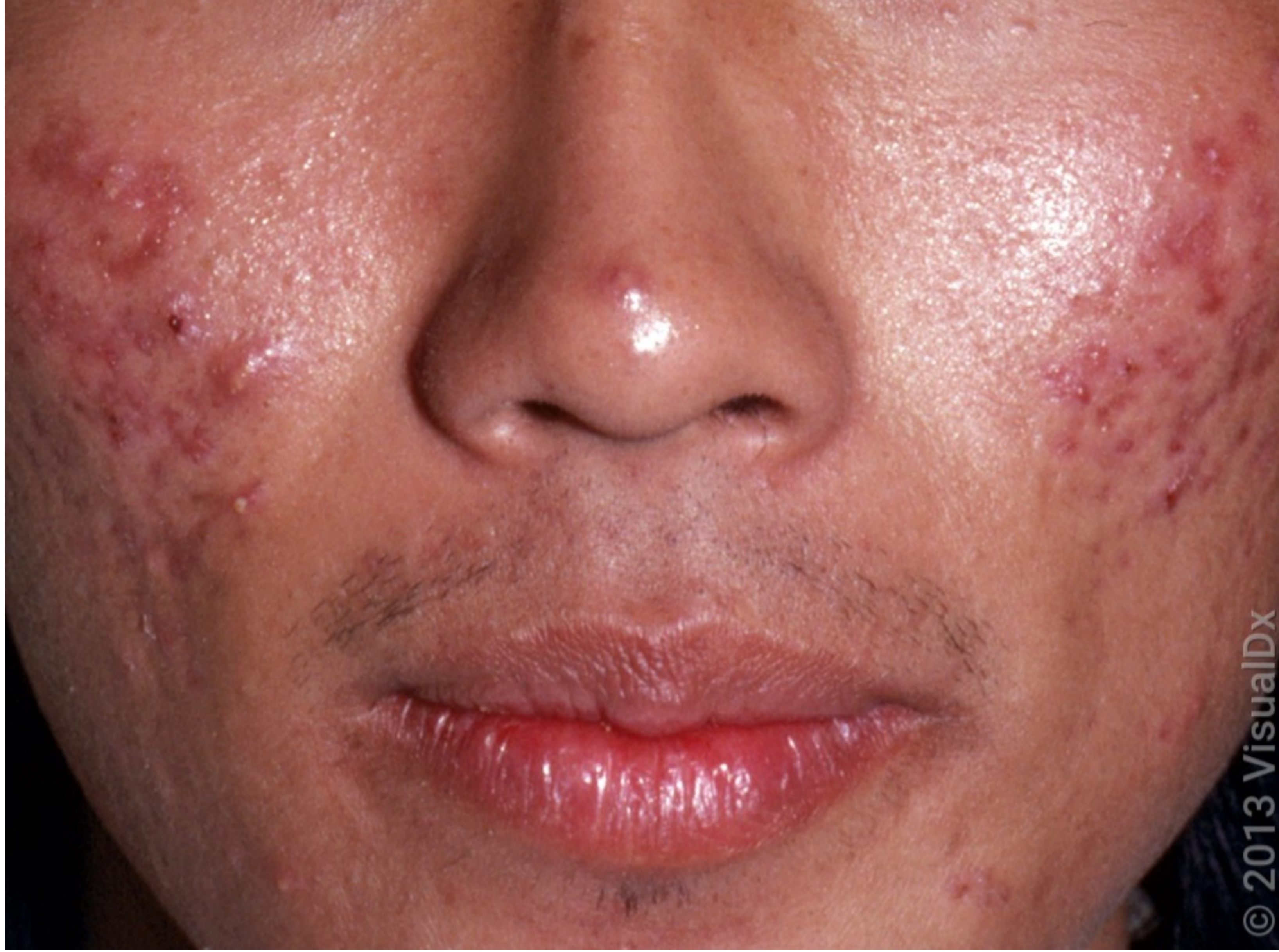
Acne vulgaris, hormonal component

- Management of mild acne vulgaris +
- Start **spironolactone 50 mg** daily x 2 weeks, then increase to 100 mg daily if tolerating well; cautioned regarding hypotension, dizziness, polyuria, teratogenicity, breast tenderness, and dysmenorrhea
- Start **combined oral contraceptive**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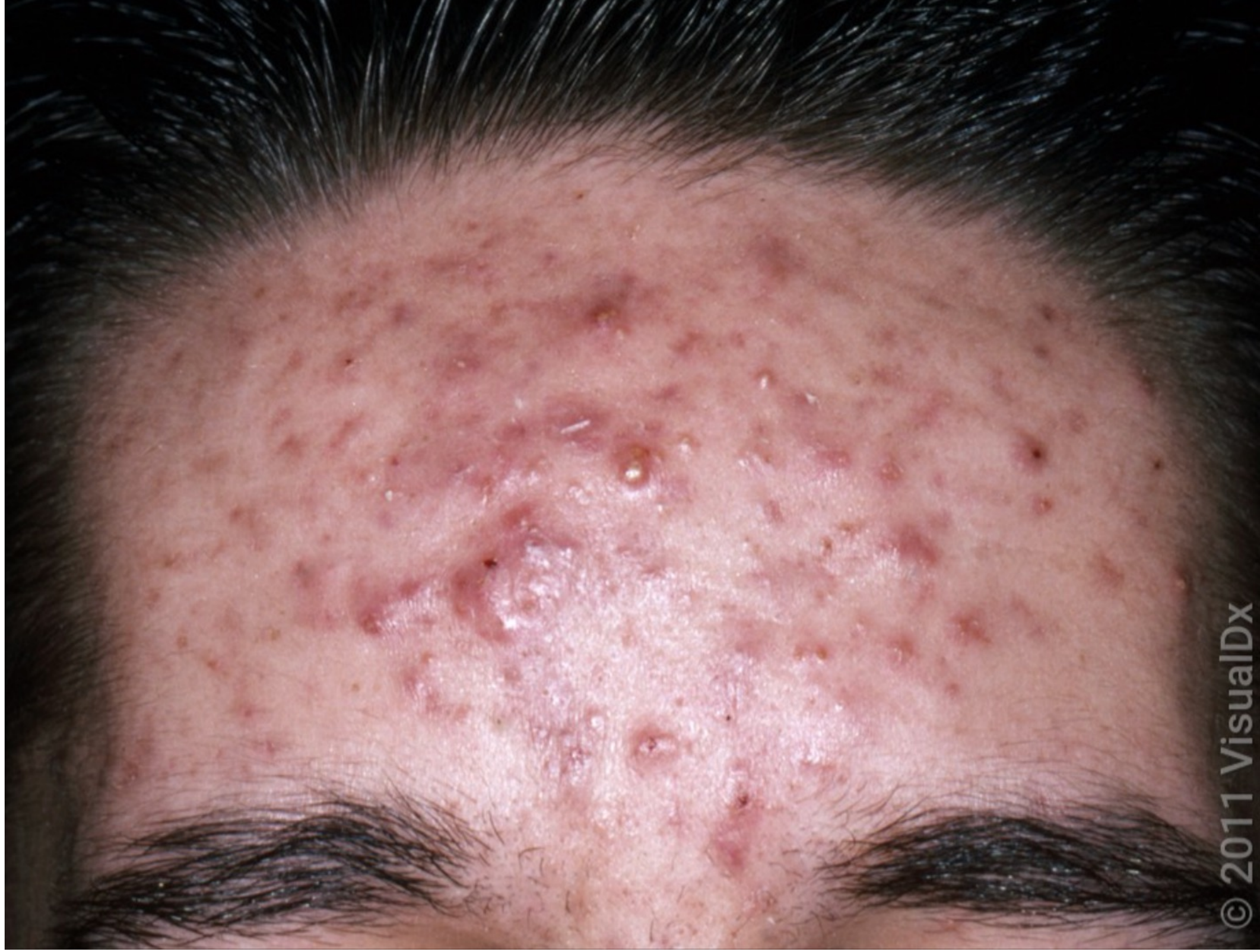
Acne vulgaris, pustular/moderate

- Management of mild acne vulgaris +
- Start **doxycycline 100 mg** twice daily; counseled regarding adverse effects, including photosensitivity and nausea; counseled to take medication with food and water and to not lie down within 1 hour of taking the medication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Acne vulgaris, severe

- **Isotretinoin**

Acne vulgaris during pregnancy

- No retinoids
- No doxycycline
- No spironolactone

- Oral or topical erythromycin
- Topical clindamycin
- Topical azelaic acid
- Topical glycolic acid
- OTC benzoyl peroxide

- Insufficient data for topical clascoterone and topical dapsone

When to refer to Dermatology

- Recalcitrant to prior therapies
- Development of scarring
  - If acne is active and causing scaring, place referral to (Medical) Dermatology
  - If acne is no longer active and the main concern is scarring, patient can make self-referral to Cosmetic Dermatology
- Nodulocystic acne
- Atypical sites (e.g., axillae, trunk, extremities)

References

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