The Song and Dance of Dermatology

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Disclosures

- I have relevant relationships with ineligible companies to disclose within the past 24 months
  - Leo pharma advisory board

Objectives

- Describe cutaneous lesions and rashes
- Perform a full body skin exam
- Perform a shave and punch biopsy
- Describe tips when referring to dermatology from primary care
- Describe skin protection measures for patients

The Skin History for Skin Lesions

- Where?
- When?
- Does it itch or hurt?
- How has it spread?
- How have individual lesions changed?
- Aggravating/Alleviating factors?
- Previous treatments?
- Other pertinent history?

Fitzpatrick TB, et al. *Color Atlas and Synopsis of Clinical Dermatology*. New York: McGraw-Hill; 2001:26

The Skin History-Additional Review of Systems

- Xerosis, wounds, rashes, or changes in skin pigmentation or color?
- Does is come and go or is it constant?
- Changes in nail thickness, splitting, discoloration, breaking, and separation from the nail bed? Hair loss, thinning, breakage?
- Allergies, including those to medications, topical skin and wound products, and food?
- Anything pruritic, scaling, scabbing, bleeding, or nonhealing? Anything growing or changing?

Hess, CT. Performing a Skin Assessment. *Nursing2010.* 2010; 40(7):66. DOI: 10.1097/01.NURSE.0000383457.86400.cc

The Skin Exam-Tips for getting started

- A full skin exam should include all skin- including hair, nails, and mucosal surfaces
- Have good lighting
- Have a routine that you do every time in order to avoid missing parts of the body
- Take pictures!



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Rosamilia LL. The Naked Truth about Total Body Skin Examination: A Lesson from Goldilocks and the Three Bears. *Dermatology World Insights and Inquires.* 2019: 1 (36)

The Skin Exam-Physical Assessment



Note: skin color, moisture, temperature, texture, mobility and turgor, and skin lesions.



When identifying a lesion or rash of concern it is always important to inspect and palpate

It is epidermal, dermal, or subcutis?

Scale or crust?

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Full Body Skin Exam



The Skin Description

4 major skin signs

Type-Primary and secondary lesions

Shape/Size

Arrangement

Distribution

Fitzpatrick TB, et al. *Color Atlas and Synopsis of Clinical Dermatology*. New York: McGraw-Hill; 2001:27-28

Nomenclature of the Skin-Primary Lesions

- ***macule***, a flat, nonpalpable circumscribed area (up to 1 cm) of color change that's brown, red, white, or tan
- ***patch***, a flat, nonpalpable lesion with changes in skin color, 1 cm or larger
- ***papule***, an elevated, palpable, firm, circumscribed lesion up to 1 cm
- ***plaque***, an elevated, flat-topped, firm, rough, superficial lesion 1 cm or larger, often formed by coalescence of papules
- ***nodule***, an elevated, firm, circumscribed, palpable area larger than 0.5 cm; it's typically deeper and firmer than a papule (large nodule is a tumor)
- ***cyst***, a nodule filled with an expressible liquid or semisolid material
- ***vesicle***, a palpable, elevated, circumscribed, superficial, fluid-filled blister up to 1 cm
- ***bulla***, a vesicle 1 cm or larger, filled with serous fluid
- ***pustule***, which is elevated and superficial, similar to a vesicle, but is filled with pus
- ***wheal***, firm edematous plaque resulting from infiltration of the dermis with fluid, relatively transient (a few hours), Most wheals are red, pale pink, or white.

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Nomenclature of the Skin-Secondary Lesions

- ***scale***, a thin flake of dead exfoliated epidermis
- ***crust***, the dried residue of skin exudates such as serum, pus, or blood
- ***lichenification***, visible and palpable thickening of the epidermis and roughening of the skin with increased visibility of the normal skin furrows (often from chronic rubbing)
- ***excoriation***, linear or punctuate loss of epidermis, usually due to scratching.
- ***Atrophy-*** thin, wrinkled skin

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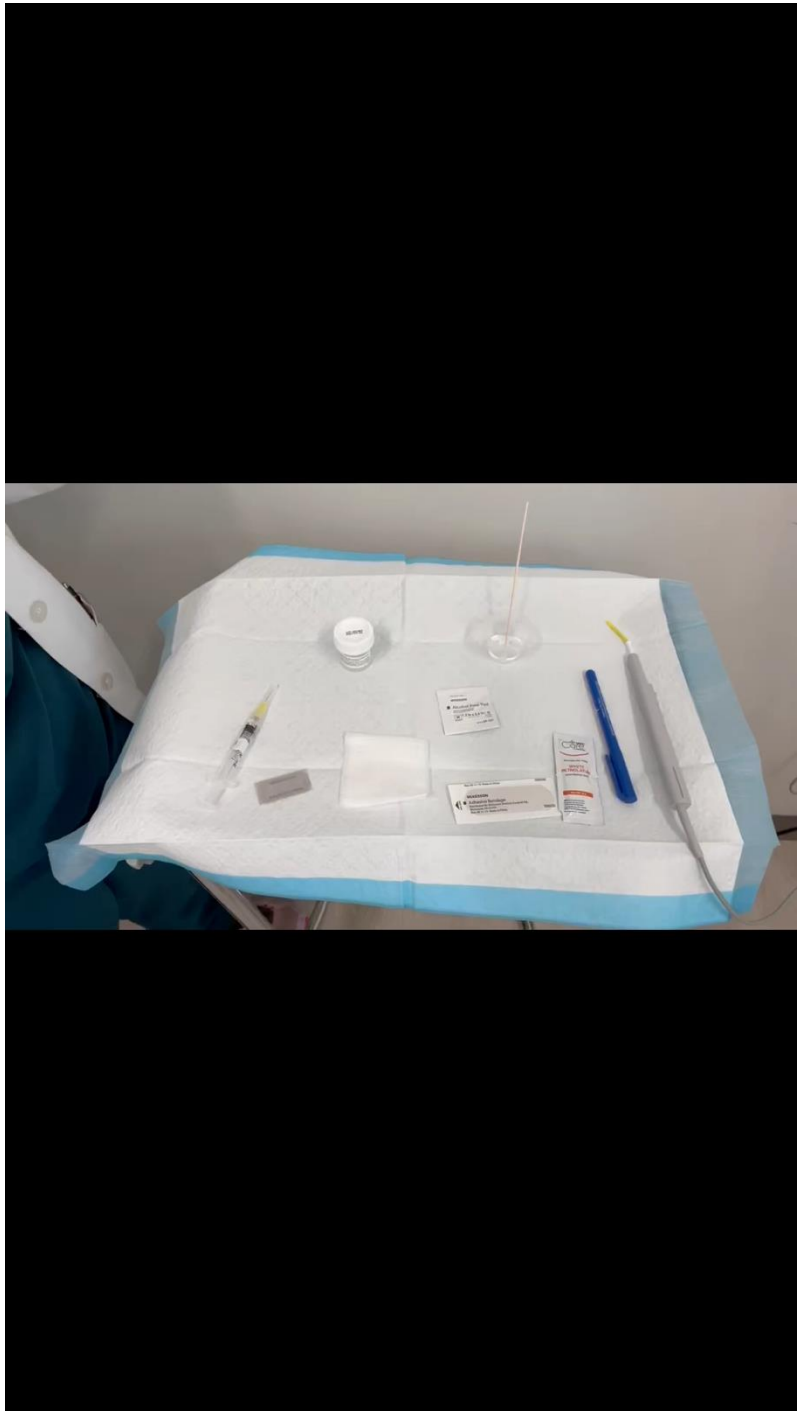
Making the Diagnosis

- If clinically suspicious, next step is to biopsy the lesion
- Multiple types of biopsies
  - Shave (tangential) biopsy-used to remove top layers of skin (epidermis and part of dermis)
  - Punch biopsy-used to remove deeper section of skin (epidermis, dermis, and subcutis)
  - Saucerization biopsy- epidermal, dermis, and occasionally subcutis
  - Incisional biopsy-used to remove a portion of a skin lesion
  - Excisional biopsy-used to remove entire portion of skin (full thickness)

Nischal U, Nischal Kc, Khopkar U. Techniques of skin biopsy and practical considerations. *J Cutan Aesthet Surg*. 2008;1(2):107-111. doi:10.4103/0974-2077.44174

Shave Biopsy Video





Punch Biopsy Video





General Tips for Dermatology Referral



Have you ruled out more acute concerns such as parasitic/bacterial/fungal infection?



No antifungal/steroid combinations



Prednisone tapers of 5 days or less is too short for chronic, inflammatory skin disease



Biopsies are best done in a dermatology office and read by a dermatopathologist



If a patient has even one spot of concern, recommend they see dermatology for a full body skin exam



Describe the rash/lesion using accurate terms

General Tips for Dermatology Referral



Dermatology providers manage biologics, its our bread and butter



Ensure patients have documentation of previous treatments when referring to dermatology, and send the note with the referral



If you are going to order labs for a specific concern, make sure they are complete so patient does not have to get additional tests drawn



Utilize good communication, through EHRs, telehealth, and other modalities to coordinate care

Prevalence of Skin Cancer

- It is estimated that in 2023 in the US
  - 106,110 new cases of melanoma
  - 5.4 million new cases of basal cell carcinoma
  - 2.8 million new cases of squamous cell carcinoma will be diagnosed
- Rural populations have a higher risk of developing skin cancer
  - increased exposure to ultraviolet (UV) radiation
  - less access to skin cancer prevention education
  - less access to skin cancer screening

Fu S, Kim S, Wasko C. Dermatological guide for primary care physicians: full body skin checks, skin cancer detection, and patient education on self-skin checks and sun protection. *Proc (Bayl Univ Med Cent)*. 2024;37(4):647-654. Published 2024 May 31. doi:10.1080/08998280.2024.2351751

Reducing Skin Cancer Risk

Skin cancer is the most commonly diagnosed cancer in the United States, and most cases are preventable.

The lifetime risk of skin cancer in the US is up to 8%

Advise yearly full body skin exam (FBSE) after age 50 by dermatology provider

Mir JF, Estrada-Campmany M, Heredia A, et al. Role of community pharmacists in skin cancer screening: A descriptive study of skin cancer risk factors prevalence and photoprotection habits in Barcelona, Catalonia, Spain. *Pharmacy Practice (1886-3655)*. 2019;17(3):1-9. doi:10.18549/PharmPract.2019.3.1455.

Reducing Skin Cancer Risk



Protection from ultraviolet (UV) radiation is important all year



UV rays reflect off of surfaces like water, cement, sand, and snow.



Unprotected skin can be damaged by the sun's UV rays in as little as 15 minutes.



The hours between 10 a.m. and 4 p.m. are the most hazardous for UV exposure outdoors in the United States.

Centers for Disease Control and Prevention. Sun Safety. CDC website. April 9, 2020. Accessed August 8, 2024.

Recommendations

- **Stay in the shade** especially during midday hours.
- **Wear clothing** that covers arms and legs
- **Wear a hat** with a wide brim to shade your face, head, ears, and neck.
- **Wear sunglasses** that wrap around and block both UVA and UVB rays.
- **Use sunscreen** with a sun protection factor (SPF) of 30 or higher, and both UVA and UVB (broad spectrum) protection.
- **Reapplication.** Put it on again if you stay out in the sun for more than two hours and after swimming, sweating, or toweling off.
- **Expiration date.** Check the sunscreen's expiration date. Sunscreen without an expiration date has a shelf life of no more than three years, but its shelf life is shorter if it has been exposed to high temperatures.
- **Cosmetics.** Some makeup and lip balms contain some of the same sun-protective ingredients used in sunscreens. If they do not have SPF 15 or higher, be sure to use other forms of protection as well, such as sunscreen and a wide-brimmed hat.
- **Avoid indoor tanning**.

Centers for Disease Control and Prevention. Sun Safety. CDC website. April 9, 2020. Accessed August 8, 2024.

For Providers

The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians counsel patients with fair skin aged 10–24 years to minimize their UV exposure to reduce their risk of skin cancer.

Findings show this can increase sun-protective behaviors

US Department of Health and Human Services. The Surgeon General's Call to Action to Prevent Skin Cancer. Washington (DC): Office of the Surgeon General (US); 2014. Reducing the Risk of Skin Cancer. Available from: https://www.ncbi.nlm.nih.gov/books/NBK247163/

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