Geriatric Dermatology

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What is geriatric dermatology?

A specialized branch of dermatology that focuses on diagnosis, management, treatment and prevention of skin conditions in older adults typically age 65 and older.



Learning objectives

- 1. Go over general statistics of the increasing number of skin diseases including skin cancers in the geriatric population
- 2. Identify the top 10 most common skin diseases seen in this population and go over treatments
- 3. Discuss skin biology and the intrinsic and extrinsic factors involved with aging skin

Top 10 most common skin diseases in geriatric population

1. Tinea





Caused by dermatophytes

 Trichophyton, Microsporum, or
 Epidermophyton

 Red, circular, scaly patches

 Caused by dermatophytes Trichophyton or Epidermophyton
 Types: interdigital, moccasintype, vesicular

2. Candidiasis

Yeast infection of the skin from moisture, heat, and occlusion

□ ill-defined borders

□ MC in patients with declining immune system

□ Dx clinically or with KOH

Tx decrease moisture, antifungal meds



Intertrigo (differential for candidiasis)



candidal intertrigo

Chronic inflammation

- Exacerbated by yeast or bacteria infection.
- Candidal intertrigo, dx by the presence of outlying satellite papules/pustules
- ☐ Well-demarcated borders
- □ Tx antibiotics

3. Xerosis

- Greek origin xero = dry osis = disorder
- □ MC cause of pruritus
- Intrinsic and extrinsic aging factors (ex: decreased collagen production, chronic disease, meds)
- Tx ointments, creams, lotions (do you know the difference?)





Intrinsic and extrinsic factors associated with aging skin

Intrinsic

Thinning of epidermis
Decreased oil production
Decreased skin cell turnover

Extrinsic

UV (sun exposure)
Smoking -> decreased blood flow to skin



What are these skin lesions called?



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NMSC incidence in white vs black patients

White patients

Highest incidence
Lifetime risk 1 in 3
BCC most common

Black patients

Incidence 5/100,000
 SCC MC, more aggressive
 Atypical presentation and location

This disparity highlights the importance of prevention and education in both groups, with a special focus on atypical presentation in darker individuals

4. Seborrheic Keratosis





Benign warty growth
 Can be tan to dark (sometimes referred to as barnacles)
 Symptomatic treatment to soften (Ex. Lac Hydrin)

5. Seborrheic Dermatitis

- Commonly affects the nasolabial folds, eyebrows and scalp
- Caused by overactivity of the sebaceous glands/results in oily crusts and scales
- □ Can be severe in those with CNS conditions such as Parkinson disease
- Tx. short course of topical steroids, long term topical antifungal creams or shampoos, sodium sulfacetamide





What is the difference?



Rosacea

- □ Inflammatory disorder
- □ Spares the nasolabial folds
- Can present with acne papules/pustules or erythema with telangiectasia from flushing/vasodilation
- □ Tx with topical metronidazole or clindamycin, oral antibiotics



Nonmelanoma Skin Cancer (NMSC)



>50% of NMSC cases occur in >65 y/o
SCC more aggressive and likely to metastasize
>80% NMSC-related deaths >65 y/o SCC primary contributor



Males compared to females 2-3x SCC 1.5-2x BCC

6. NMSCa. Actinic keratosis (precursor to SCC)

- Rough keratotic areas on sun-damaged skin
- ☐ May progress to SCC if untreated
- ☐ May flake off and reappear later
- □ Tx: LN 2, topicals (Imiquimod, 5-fluoro).





6. NMSC b. SCC

□ 2nd MC cutaneous malignancy

□ MC on head, neck, and hands

- Crusted, keratotic lesions on sundamaged skin
- Dx/Tx. Bx/excision, EDC, Radiation
 SCC in situ (Bowen's disease)





6. NMSCb. SCC (continued)





6. NMSCc. SCC (keratoacanthoma type)



Variant of SCC
 A dome-shaped lesion with central keratin-filled crater
 Emerges quickly, enlarges rapidly
 Can regress spontaneously, however complete removal is recommended

6. NMSC d. BCC

□ MC cutaneous malignancy

□ Rarely metastasizes, locally invasive

□ "Pearly" lesion with telangiectasias

Multiple variants (superficial spreading, nodular, sclerosing)

Dx/Tx - Bx/Excision/Superficial Radiation/EDC/Topical/Oral





7. Melanoma



□ Most aggressive type of skin cancer (ABCDE) □ Causes: genetics, sun exposure □ MC on legs in women/back in men □ MC geriatric variant: lentigo maligna (high recurrence rate from ill-defined borders - excision) □ Life expectancy determined by stage and genetics

Merkel cell carcinoma



Rare, aggressive skin cancer
 Painless nodules purple/blue in color
 MC on head/neck area
 MC in geriatric patients
 Tx: surgery then radiation and chemotherapy for severe cases

8. Psoriasis



Sharply demarcated erythematous plaque with silvery scale
 Immune mediated disease
 Faster skin cell turnover time (14 days vs. 25-45 days in normal skin)
 Tx with topical steroids, biologics

What is causing this eruption?





9. Scabies

- Intensely pruritic contagious mite infestation
- Classic erythematous excoriated rash occurs in skin folds
- □ Variant: Norwegian/keratotic
- Rash may develop after 2-6 weeks of initial exposure



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9. Keratotic Scabies



High index of suspicion in long-term care facilities
 Dx by clinical/skin scrape
 Tx: Elimite 5% cream. Adjunctive tx Ivermectin. Post Tx: Topical steroids highly recommended.

Post-treatment rash may persist (Reasons?)

Scabies: myths vs reality

Scabies can be passed between humans and household pets

- Animal forms of scabies exist, but are species-specific ie cannot be transferred
- Canine scabies or "mange" can crawl on humans and cause itching, but are unable to reproduce and will soon die



Adequate tx causes instant relief

Tx regimens must be followed specifically
 All contacts should be treated twice: all at the same time and again 7 days later (allows eggs to hatch)

Neurodermatitis (differential for scabies)



 Arises from compulsive or habitual skin scratching or picking in absence of underlying pathology

Strong relationship between neurodermatitis and underlying psychiatric disease

MC underlying diseases are OCD, depression, anxiety and substance use disorder

What is causing this rash?



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Herpes Zoster (Shingles)

- Cutaneous viral infection resulting from reactivation of varicella virus in cutaneous nerves
- □ Unilateral painful vesicles
- Postherpetic neuralgia
- □ Tx antiviral (acyclovir)
- Shingrix 90% effective
 2 shots b/t 2-6 month period leads to longer lasting immunity



Bullous Pemphigoid

- Autoimmune blistering disease common in elderly
- MC in lower extremities or dependent areas
- Predisposed by lowered immune system and certain meds (furosemide, NSAIDs, and ACE-i)
- □ Tx: oral or topical steroids, severe cases biologics and immunosuppressants





10. Atopic dermatitis



With increased understanding of immunosenescence, atopic dermatitis is increasingly being recognized in the older adult population.

10. Allergic contact dermatitis (ACD)



ACD represents a delayed-type (type IV) HSR that occurs when allergens activate antigen-specific T cells in a sensitized individual
 ACD typically requires repeat exposures before an allergic response is noted. ACD can occur 24-48 hours after exposure to the offending agent.

10. Irritant contact dermatitis



Irritant contact dermatitis represents the direct toxic effect of an offending agent on the skin
 Irritant contact dermatitis can occur after one exposure to the offending agent





Common condition that affects the lower extremities of individuals with compromised vein function (eg, <u>venous valve insufficiency</u>, venous hypertension)

☐ Most prevalent in older individuals

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Thank You!





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Any questions?

