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Skin Disease & Parkinson's

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March 8, 2024

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Outline

- Oily skin
- Seborrheic dermatitis
- Skin cancer
- Rosacea
- Psoriasis
- Bullous pemphigoid
- Dry skin
- Dry eyes
- Wound care

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Conflicts of Interest

- Employed by a private equity-backed dermatology practice
- Otherwise, no conflicts

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Oily Skin

- Also known as sebum or seborrhea
- Patients with PD have increased sebum
- Wash
  - Hair 3-7 times per week (min once per 2 weeks)
  - Face twice per day
- Less often is okay as long as no skin problems

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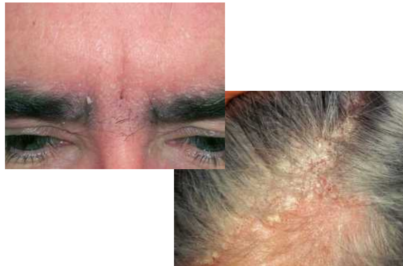
Seborrheic Dermatitis

- "Dandruff" is more common in patients living with PD
- Red, scaly, itchy rash in oily areas of skin
  - Scalp
  - Eyebrows
  - Beard
  - Corners of nose
  - Ears



https://dermnetnz.org/

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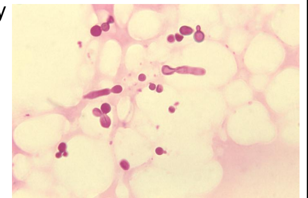
Seborrheic Dermatitis

- Caused by oil-loving *Malassezia* species of yeast
- Oil is the problem and not the solution
- This yeast is present on all human skin
- People suffering from seborrheic dermatitis have
  - Greater burden of the yeast on affected areas
  - Greater sensitivity to its inflammatory



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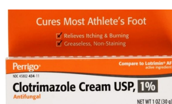
Seborrheic Dermatitis



- Treatments aimed to decrease yeast and decrease irritation:
  - Over-the-counter
    - Antifungal clotrimazole (Lotrimin) 1% cream twice daily
    - Anti-dandruff shampoo
    - Hydrocortisone 1% cream twice daily as needed
  - Prescriptions:
    - Antifungal ketoconazole 2% cream twice daily
    - Ketoconazole 2% shampoo 1-7 times weekly
    - Anti-inflammatory topical steroids e.g.,
      - Clobetasol 0.05% solution twice daily as needed
      - Hydrocortisone 2.5% cream twice daily as needed

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Cancer

- PD patients have lower risk of almost all types of cancer, except…
- Higher risk of skin cancer
  - Hazard ratio to get any skin cancer 1.2
  - Relative risk for melanoma 1.5 to 2
- Possible mechanisms
  - Alpha-synuclein may be involved in causing both
  - Decreased melanin precursors in both
  - Overlapping/linked genes
    - *CYP2D6*
    - *GSTM1*
    - *PLA2G6*
    - *MC1R*
    - *Parkin*
  - Not levodopa

A. Bose et al. / Parkinson's Disease and Melanoma, J of PD, 2018.

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Skin Cancer

- Non-melanoma skin cancer
  - Basal cell carcinoma
  - Squamous cell carcinoma
    - Precursor is actinic keratosis
- Melanoma
- Rare types
  - Merkel cell carcinoma
  - Dermatofibrosarcoma protuberans
  - Sebaceous carcinoma

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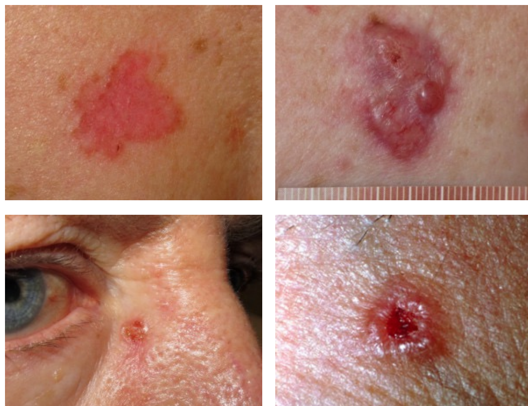
DermNet™ All about the skin

DermNet New Zealand

https://dermnetnz.org/

Basal Cell Carcinoma



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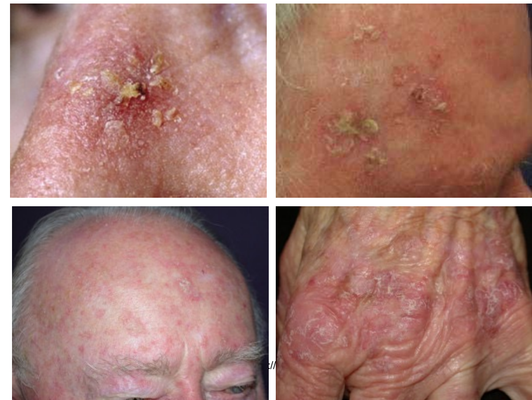
Actinic Keratosis “Pre-Cancer”



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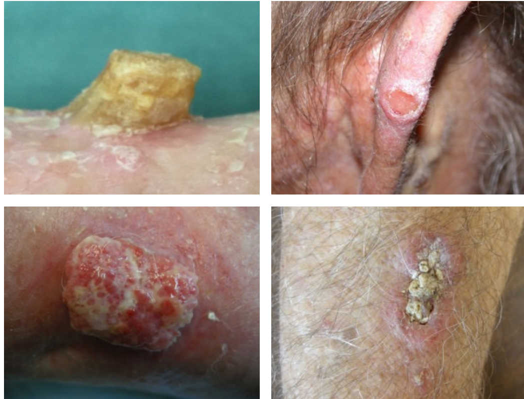
Squamous Cell Carcinoma



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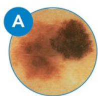
SpotSkinCancer.org

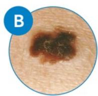
American Academy of Dermatology

Melanoma ABCDEs

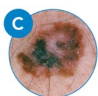
PD patients have higher melanoma risk



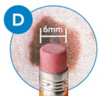
A stands for ASYMMETRY. One half of the spot is unlike the other half.



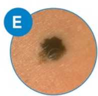
B stands for BORDER. The spot has an irregular, scalloped, or poorly defined border.



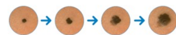
C stands for COLOR. The spot has varying colors from one area to the next, such as shades of tan, brown or black, or areas of white, red, or blue.



D stands for DIAMETER. While melanomas are usually greater than 6 mm, or about the size of a pencil eraser, when diagnosed, they can be smaller.



E stands for EVOLVING. The spot looks different from the rest or is changing in size, shape, or color.



Ref: American Academy of Dermatology

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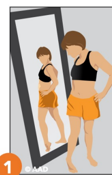
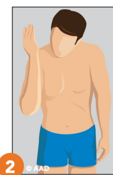
2 Skin Cancer Self-Examination

How to Check Your Spots:

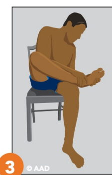
Checking your skin means taking note of all the spots on your body, from moles to freckles to age spots. Skin cancer can develop anywhere on the skin and is one of the few cancers you can usually see on your skin. Anyone can get skin cancer, regardless of skin color. Ask someone for help when checking your skin, especially in hard-to-see places.



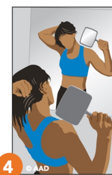
1. Examine your body front and back in a mirror, then look at the right and left sides with your arms raised.



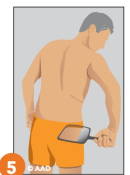
2. Bend your elbows and look carefully at your forearms, underarms, and palms.



3. Look at the backs of your legs and feet, the spaces between your toes, and the soles of your feet.



4. Examine the back of your neck and scalp with a hand mirror. Part your hair for a closer look at your scalp.



5. Finally, check your back and buttocks with a hand mirror.

If you wear nail polish, remember to check your nails when the polish is removed.

Ref: American Academy of Dermatology

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3 Record Your Spots

Make notes of your spots on the images below so you can regularly track changes.

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Record Your Spots

MOLE #	A Asymmetrical? Shape of Mole	B Type of Border?	C Color of Mole	D Diameter/Size of Mole. Use ruler provided.	E How has mole changed?
1	OVAL, EVEN	JAGGED	PINK	1.5MM	YES, LARGER

mm 10 20 30 40

Name:__________ Date: __________

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Here's how to protect yourself from the sun:

Seek shade. The sun's rays are strongest between 10 a.m. and 2 p.m. If your shadow is shorter than you are, seek shade.

Wear sun-protective clothing, such as a lightweight, long-sleeved shirt, pants, a wide-brimmed hat, and sunglasses with UV protection, when possible. For more effective protection, choose clothing with an ultraviolet protection factor (UPF) number on the label.

SPF 30

Apply a broad-spectrum, water-resistant sunscreen with an SPF of 30 or higher to all skin not covered by clothing. Broad-spectrum sunscreen provides protection from both ultraviolet A (UVA) and ultraviolet B (UVB) rays. Reapply every two hours, even on cloudy days, and after swimming or sweating.

Use extra caution near water, snow, and sand, as they reflect and intensify the damaging rays of the sun, which can increase your chance of skin cancer.

Avoid tanning beds. If you want to look tan, consider using a self-tanning product, but continue to use sun protection outdoors.

Ref: American Academy of Dermatology

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My Favorite Sunscreens

- Face
  - Elta MD Sheer
  - Elta MD Elements (tinted)
  - Neutrogena Clear Face
  - Cerave AM
  - Revision Intellishade $$$$ (tinted)
- Body
  - Elta MD Aox Mist $$$
  - Neutrogena Helioplex

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My Favorite UPF 50 Clothing

- Women
  - Free Fly
  - Cabana Life
  - IBKUL
  - Axesea long sleeve swimsuits
- Men
  - Vuori
  - Free Fly
  - Columbia PFG

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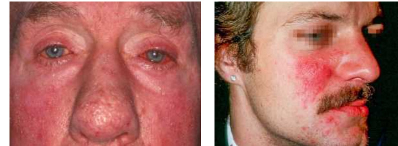
Rosacea

- Patients with rosacea have 2x higher risk of developing PD
- Overall PD prevalence 200 / 100,000 people
  - 0.2% of people have PD in Denmark



1. https://dermnetnz.org/
2. Shah et al. Parkinson's Disease and Its Dermatological. *Cureus*, 2020.
3. Vicky LJ et al. Identifying the prevalence of Parkinson's. *Parkinsonism Relat Disord*, 2024.

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Rosacea

- Treatments
  - Over-the-counter
    - Avoid triggers
    - Excellent skin care yields 10-20% improvement
    - Wash with Vanicream / Cetaphil / Cerave gentle cleanser twice daily
    - Daytime: moisturize with non-comedogenic sunscreen moisturizer
      - E.g., Cerave AM
      - Elta Clear
    - Nighttime: moisturize with non-comedogenic moisturizer
      - E.g., Cerave PM
      - Vanicream Lotion
  - Prescriptions
    - Topical and oral antibiotics
    - Azelaic acid

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Rosacea

Sample skin care routine

- Morning
  1. Gentle cleanser
  2. +/- Rosacea medicine
  3. Moisturizing sunscreen
- Evening
  1. Gentle cleanser
  2. +/- Rosacea medicine
  3. Oil-free moisturizer

*Gritty eye sensation may be ocular rosacea → gently wash eyelashes, too

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Psoriasis

- Patients with psoriasis have increased risk of developing PD
- Coincident psoriasis and Parkinson's
  - Accelerated progression of PD
  - Higher risk of dementia
- Biologic treatments for psoriasis (TNF-alpha inhibitors) may decrease the risk of dementia

Shang H et al. Psoriasis and PD progression, *JEADV*, 2022.

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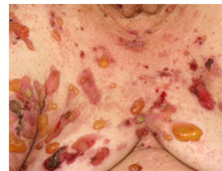
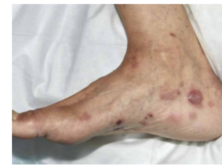
Bullous Pemphigoid (BP)

- **Pemphigoid** → like pemphigus → Greek derivation pemphix → bubble or blister
- -**oid** means similar but not the same
- Rare, itchy blistering rash affecting elderly individuals
- Auto-immune condition





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Bullous Pemphigoid (BP)

Rituxan
Rituximab

- Rare condition, incidence 8 in 1 million people
- More common in people with neurological conditions
- PD increases risk of developing BP (3.4 fold)
- Occurs average of 6.7 years after neurological diagnosis
- Patients with both have a worse prognosis
- Treatments
  - High potency topical steroids
  - Oral antibiotics for immunomodulation
  - Systemic steroids and immune-modulating medicines

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Dry Skin (Xerosis)

- Very common
- May be a medication side effect
- Dove sensitive skin bar soap to soiled areas only
- Barely pat dry
- Immediately apply a heavy moisturizing cream or ointment
  - Seals in moisture
  - No lotion
  - Twice daily may be needed
- Hands
  - Cicalfate hand cream
  - Cavilon barrier cream

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Dry Eyes (Keratoconjunctivitis Sicca)

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- More common in people living with PD
- May be a medication side effect
- Establish with ophthalmologist (medical doctor)

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Wound Care

- Vinegar water soaks daily after bathing
  - 1 part distilled white vinegar
  - 4 parts water
- Copious petrolatum ointment (Vaseline)
- Cover the wound
  - Clear film bandages (Tegaderm)
  - Paper tape
  - Gauze
  - Tubifast
  - Mepitel
  - Conform bandages
  - Cuticerin non-stick bandages
  - Mepilex Ag (silver)

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Questions?

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Thanks!

Katherine Hunt, MD