

@DERMOMTOLOGY

SKIN CONCERNS 101

DR. MARA EVANGELISTA-HUBER



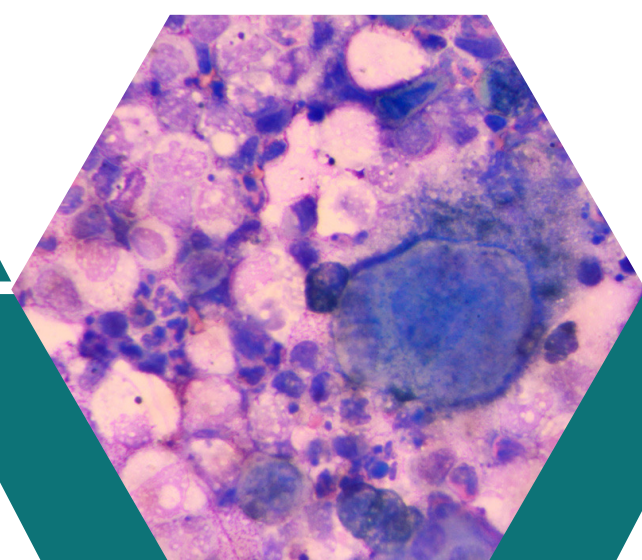
Skin concerns

- **Harmless to life threatening**
- **Transient to chronic and recurrent**
- **“Skin deep” to beyond “skin deep”**
- **Aesthetic to medical in nature**
- **Simple to multifactorial etiopathogenesis**

Diagnosing and treating skin conditions



Main structure of skin affected



Underlying etio-pathogenesis



Site and distribution



Treatment mechanism of action

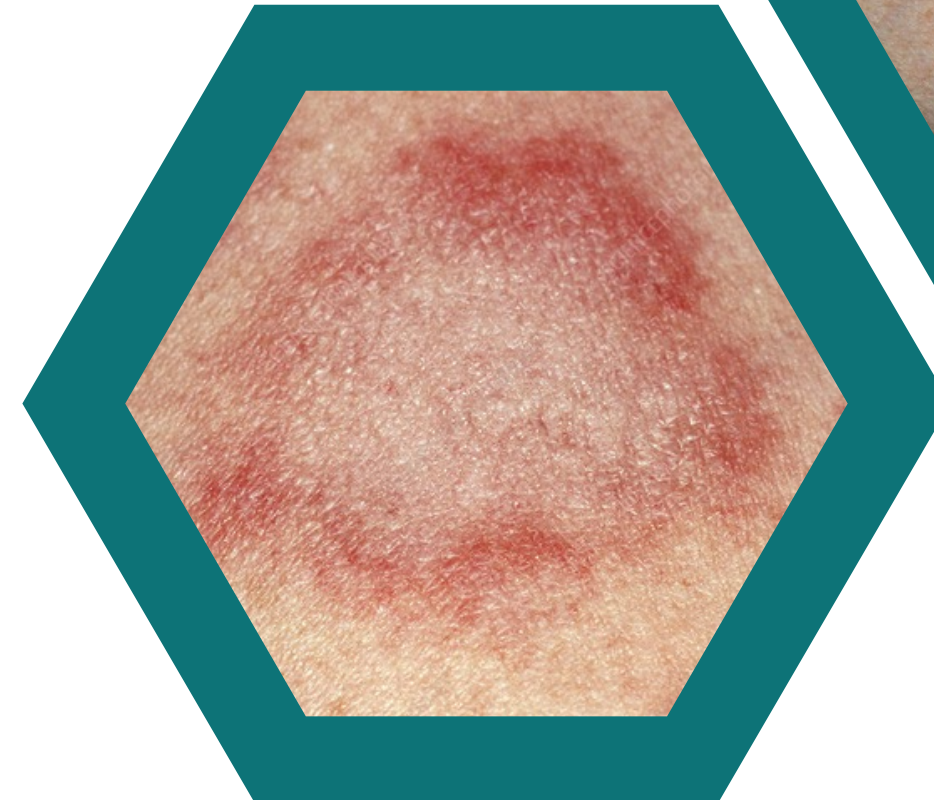


Patient-related factors

**SKIN
CONDITIONS:**
questions to ask
& values to live by

Don't miss
the forest
for the trees

Some skin concerns look quite similar, especially up close.

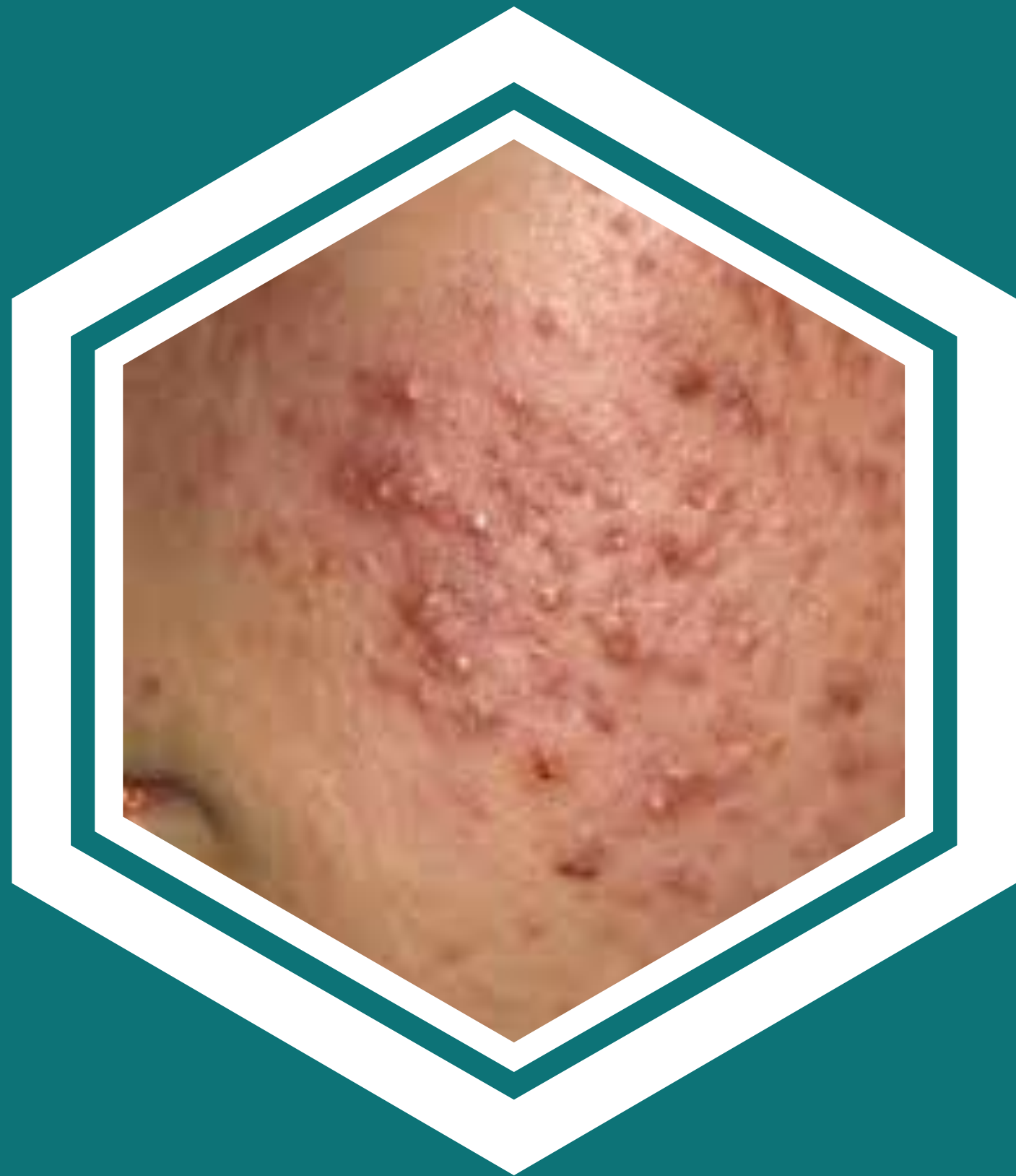


**We need
to look at
the bigger
picture.**

- Duration
- Evolution
- Site/location
- Symmetry
- Arrangement/pattern
- Size, shape, borders
- Color

**We need
to look at
the bigger
picture.**

- Other parts of the body affected
- Other symptoms
- Triggering/exacerbating factors
- Family history
- Drugs/cosmetics used
- Underlying conditions



Spot the difference



Spot the difference



Spot the difference



DRY SKIN



SEBORRHEIC DERMATITIS

Spot the difference



Spot the difference



PSORIASIS



TINEA CORPORIS

Spot the difference



Spot the difference



Spot the difference

**What is the
origin story?**

**Etio-
pathogenesis
= treatment**

Skin barrier dysfunction?

Infectious agent?

Inflammatory process?

**Neoplastic process?
<benign or malignant>**

**MANY SKIN
CONDITIONS
ARE MULTI-
FACTORIAL.**



Acne

- **Abn. follicular hyperkeratinization**
- **Increased sebum production**
- **Cutibacterium acnes**
- **Inflammation**



Acne

- **Abn. follicular hyperkeratinization**
Keratolytics/comedolytics
- **Increased sebum production**
Agents that target hormones
- **Cutibacterium acnes**
Antibacterial agents
- **Inflammation**
Anti-inflammatory agents



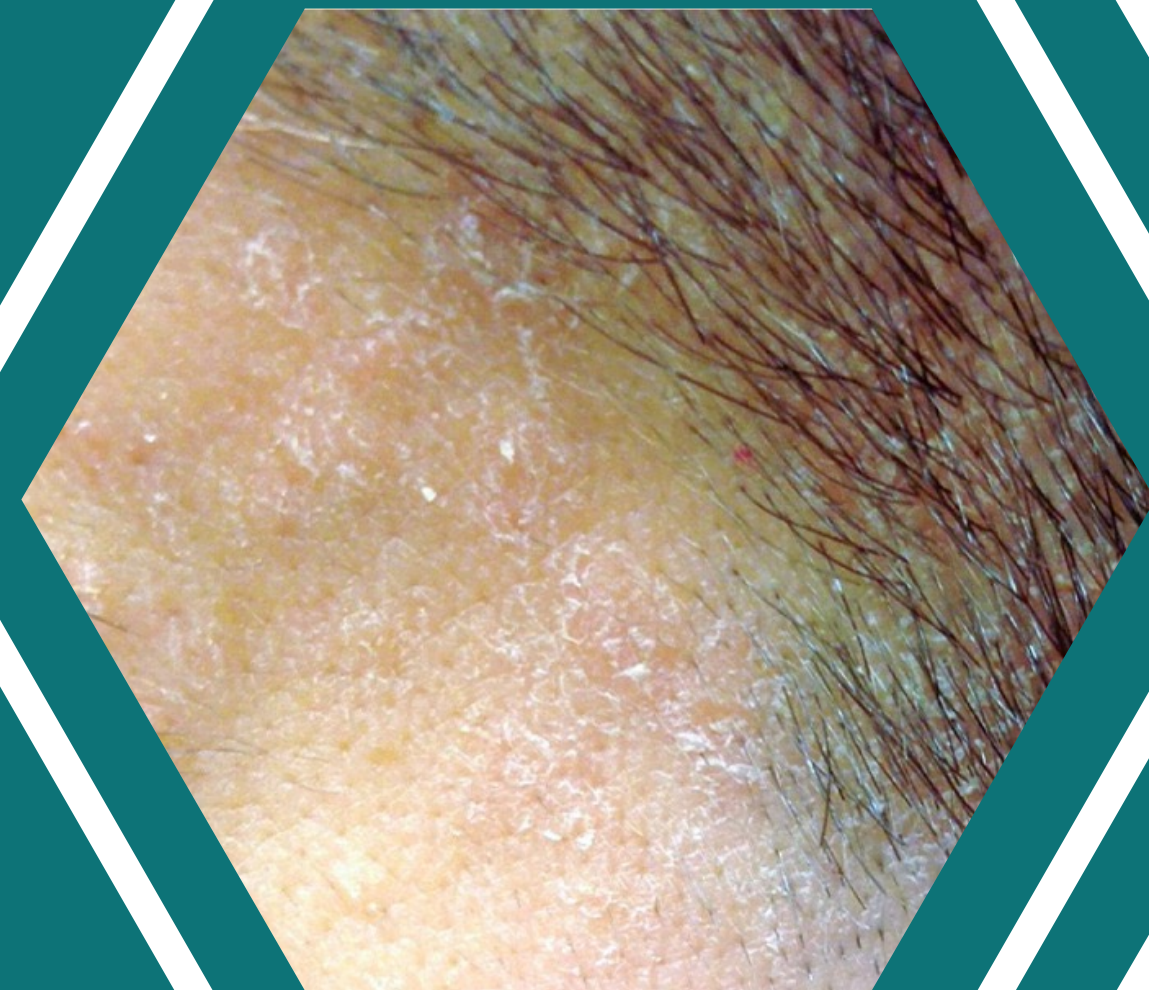
Atopic dermatitis

- **Skin barrier dysfunction**
- **Increased immune response**



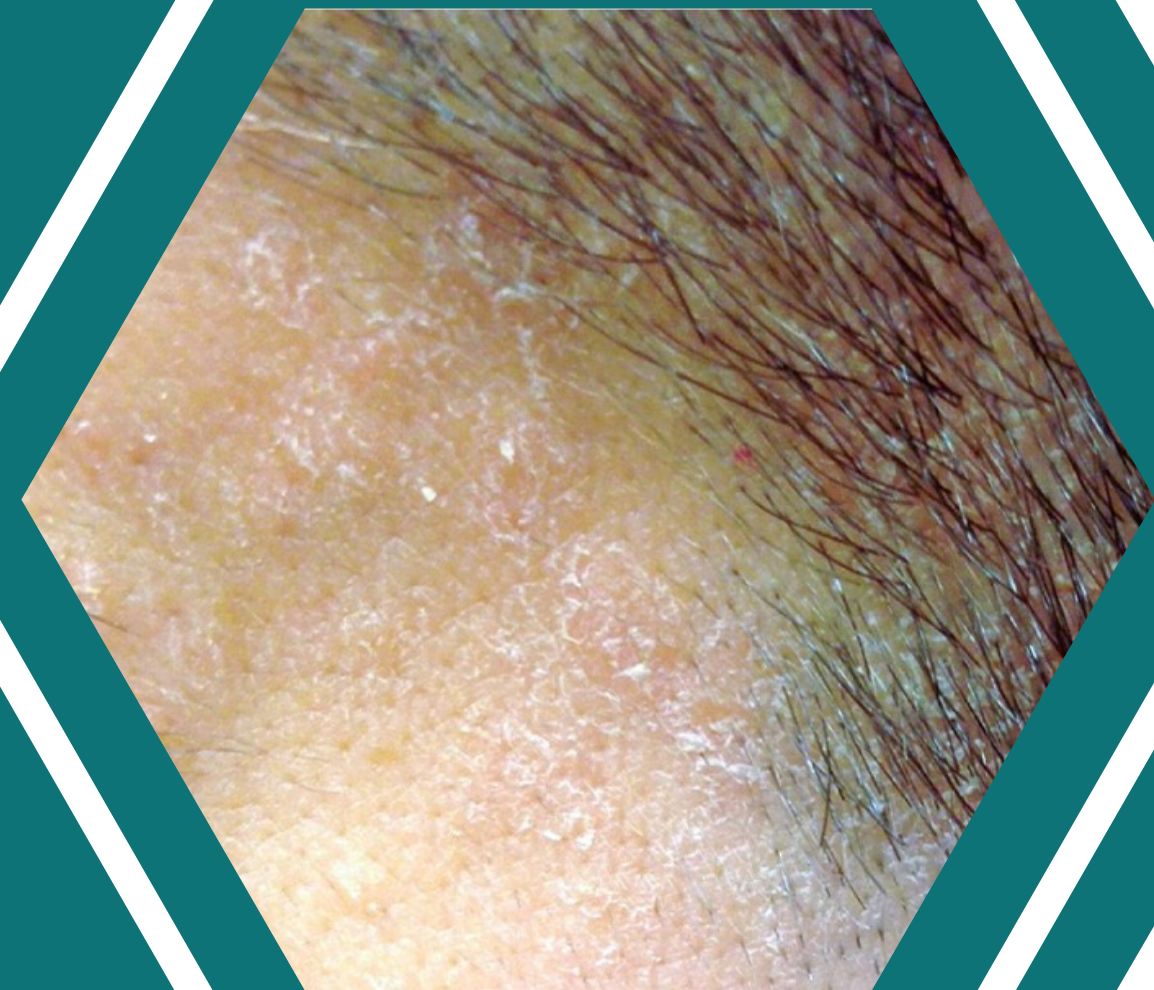
Atopic dermatitis

- **Skin barrier dysfunction**
Support skin barrier
- **Increased immune response**
Anti-inflammatory agents
Reduce exposure to triggers



Seborrheic dermatitis

- **Overgrowth of Malassezia**
- **Buildup of skin cells and sebum**
- **Inflammation**
- **Skin barrier dysfunction**



Seborrheic dermatitis

- **Overgrowth of Malassezia**
Anti-fungal agents
- **Buildup of skin cells and sebum**
Keratolytics
- **Inflammation**
Anti-inflammatory agents
- **Skin barrier dysfunction**
Support skin barrier

**Where is
the beef?**

What do
we need to
reach or
target?

Localized to the skin

*What layer of the
skin is mainly affected?*

*Is it an abnormality of specific
skin cells (i.e. melanocytes)?*

*Are other skin structures
involved (i.e. hair follicles, blood
vessels, sweat glands)?*

Systemic involvement

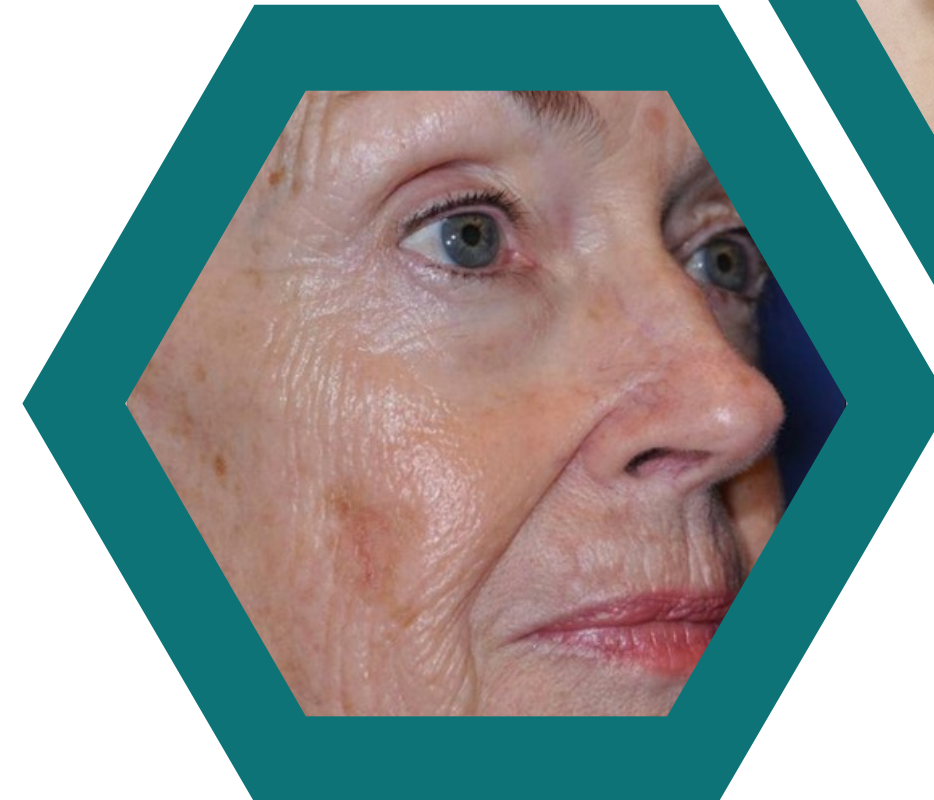
What do
we need to
reach or
target?



**WART: VIRUS
INFECTS EPIDERMIS**



**MOLE: INCREASE IN
MELANOCYTES**



**PHOTOAGING:
AFFECTS ALL LAYERS
OF THE SKIN**

What do
we need to
reach or
target?

**Choose
your fighter**

**What is your
treatment of
choice?**

**Topical product
(Drug or cosmetic)**

**Systemic product
(Oral drug, supplement, etc)**

In-office treatment

**Topicals
are often
adequate
for these
concerns**

- **Conditions occurring in the superficial skin**
- **Only affects small areas of the body**
- **e.g. texture concerns, dehydrated or dry skin, mild acne, mild eczema, superficial pigmentation**

**Topicals
are often
inadequate
for these
concerns**

- **Conditions affecting deep skin layers and beyond**
- **Widespread involvement**
- **Refractory to prior topical therapy**
- **Underlying conditions**

**Topicals
are often
inadequate
for these
concerns**

- Moderate to severe acne
- Acne scars
- Extensive eczema
- Widespread infection
- Resistant melasma
- Deep wrinkles
- Deep pigmentation

**Attack on
all sides**

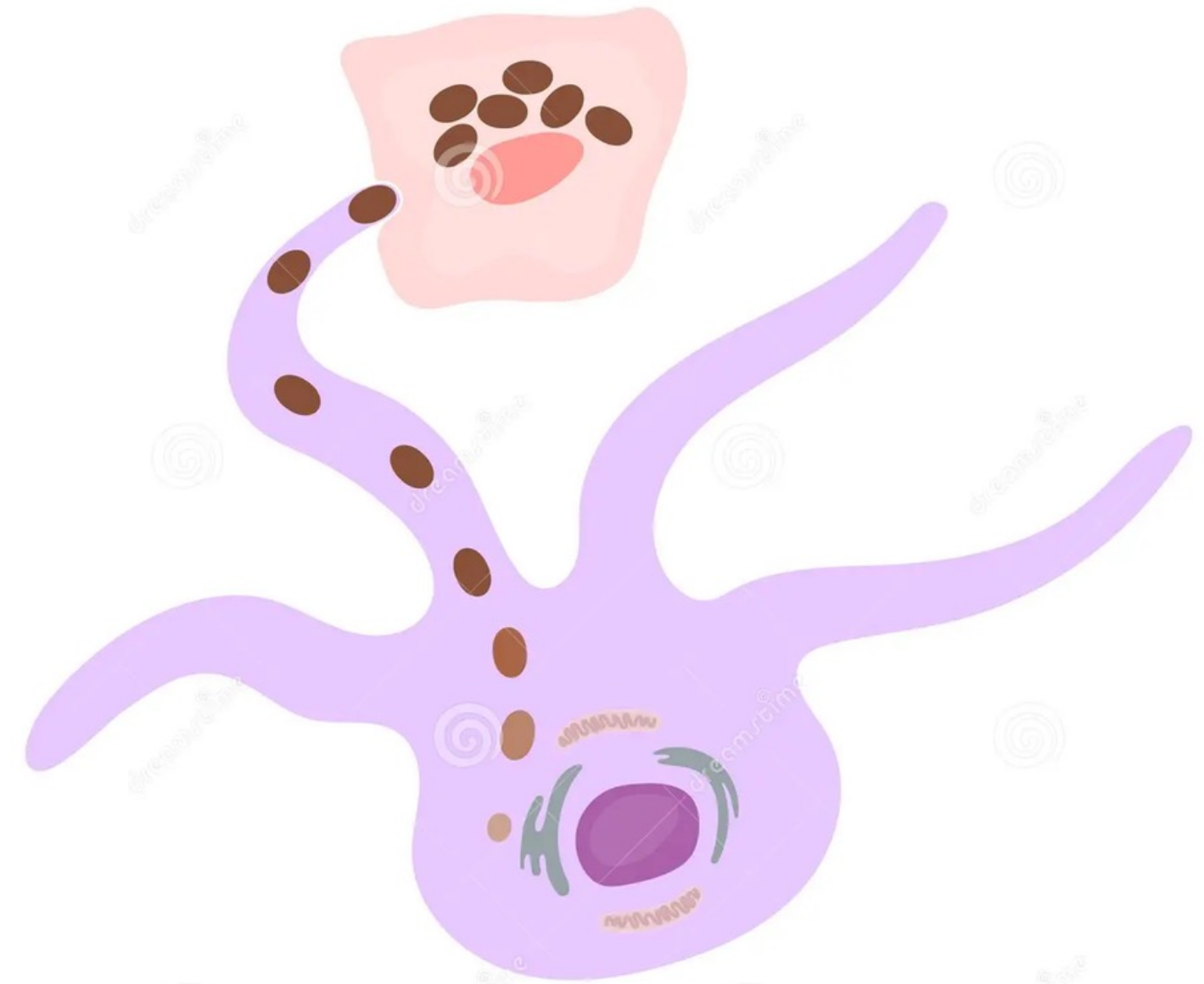


Melasma

- **Overexposure to UV light**
- **Hormonal factors**
- **Genetics**
- **Visible and infrared light (?)**

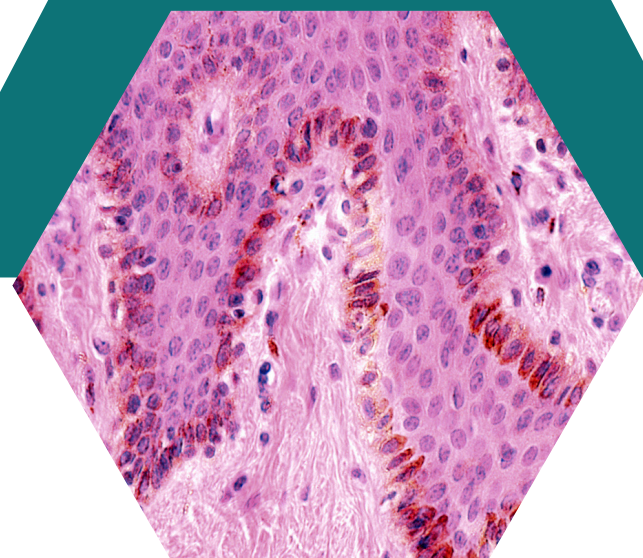


Melasma

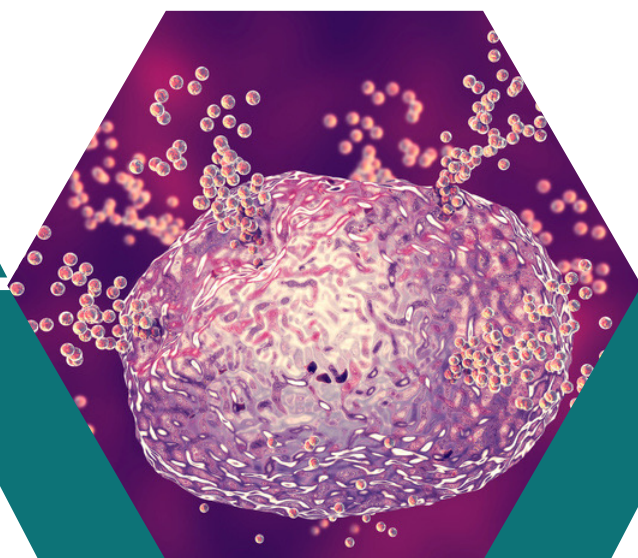


MELANIN TRANSFER

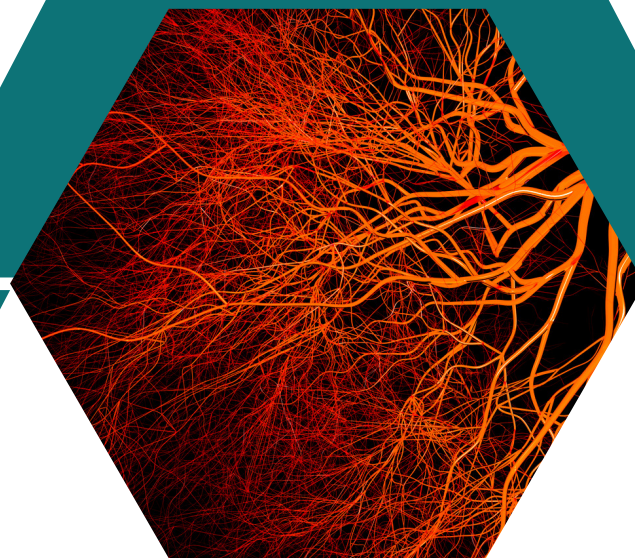
Why is melasma difficult to treat?



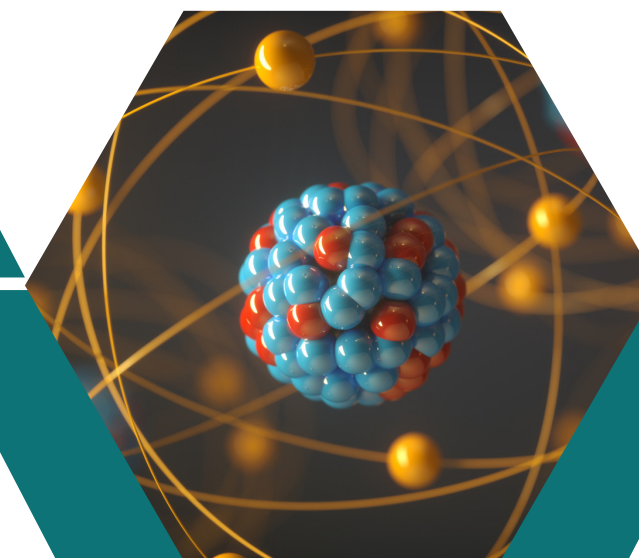
Melanocytes



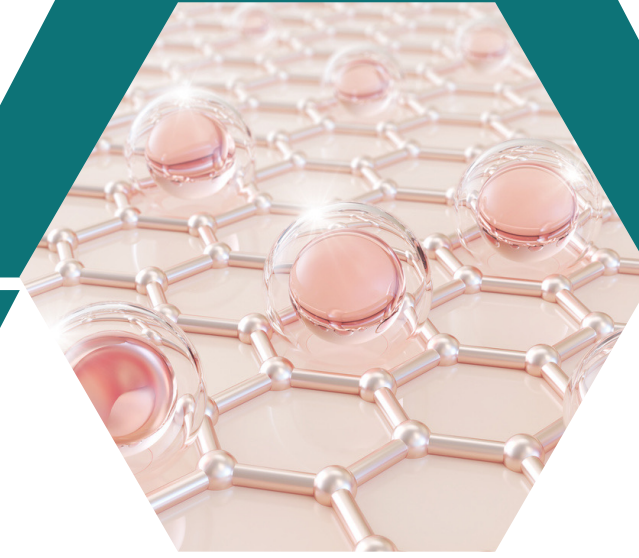
**Other skin cells
(keratinocytes,
mast cells)**



Neo-angiogenesis



**Inflammation &
oxidative stress**



**Skin barrier
dysfunction**



Melasma

1. Prevent triggers

- Sun avoidance and photoprotection
- Discontinue OCPs/causative drugs
- Address underlying medical conditions
- Avoid prolonged, high heat exposures (ovens, fires)

2. Melanocyte-centered treatment

- Inhibit melanin synthesis
- Inhibit transfer of melanin into keratinocytes

3 Non-melanocyte-centered treatment

- Exfoliate pigmented keratinocytes
- Anti-inflammatory
- Anti-oxidant
- Restore and support skin barrier
- Target blood vessels
- Target other skin cells (e.g. mast cells)



Melasma

Treatment	Decrease melanin synthesis	Decrease melanin transfer to keratinocyte	Exfoliate or increase skin cell renewal	Anti-inflammatory/anti-oxidant	Target blood vessels and mast cells
Hydroquinone	✓				
Retinoids	✓	✓	✓		
Triple combi cream*	✓	✓	✓	✓	
Arbutin	✓				
Kojic acid	✓				
Azelaic acid	✓				
Licorice	✓				
Cysteamine	✓			✓	
Ascorbic acid	✓			✓	
Niacinamide		✓			
Soy extract		✓			
Hydroxy acids			✓		
Tranexamic acid**				✓	✓
Thiamidol	✓				
Methimazole	✓				

*TCC: Hydroquinone + steroid + tretinoin

**Topical TXA is not as well studied as oral TXA.



Skin aging

- **Reduced skin turnover**
- **Reduced skin sebum**
- **Increased pigment**
- **Reduced/impaired structural components of the skin**
- **Increased oxidative stress**



Skin aging

- **Reduced skin turnover**
Retinoids, keratolytics
- **Reduced skin sebum**
Moisturizing ingredients
- **Increased pigment**
Sunscreens, depigmenting agents
- **Reduced/impaired structural components of the skin**
Retinoids, in-office procedures
- **Increased oxidative stress**
Live a healthy lifestyle
Anti-oxidants

**Heroes over
sidekicks**

Melasma treatment ladder



Third line: add-on/replacement to topical therapy (severe/non-responsive melasma)

- In-office chemical peels
- Microneedling
- Lasers and energy-based devices
- Platelet rich plasma
- Systemic agents (e.g. oral tranexamic acid, oral anti-oxidants)

Second line: if cannot tolerate first line or first line not available

- Non-HQ based topical agents

First line: most evidence of efficacy

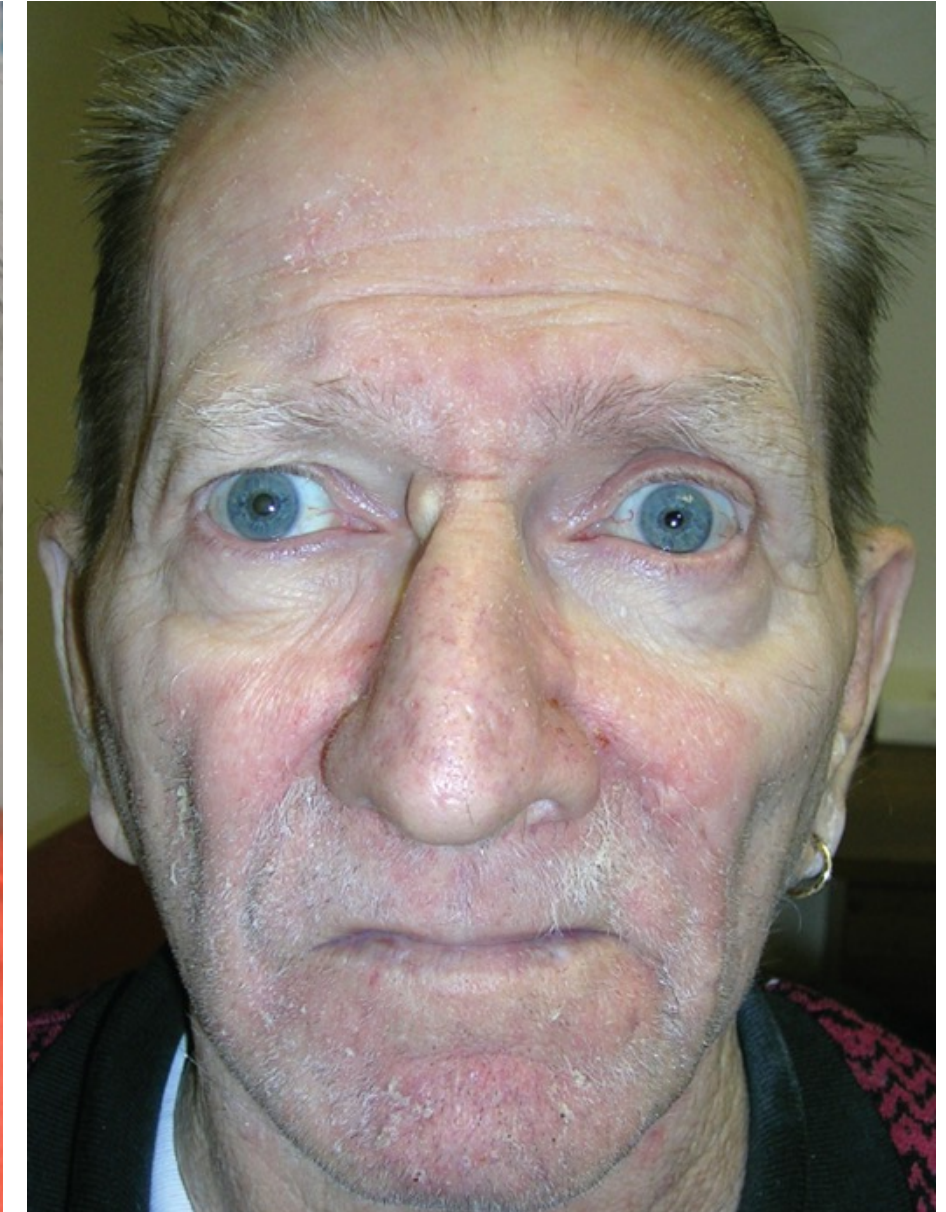
- Hydroquinone (HQ) and triple combination therapy (hydroquinone + steroid + tretinoin)

Acne treatment guidelines

	Mild	Moderate	Severe
1st Line Treatment	Benzoyl Peroxide (BP) or Topical Retinoid -or- Topical Combination Therapy** BP + Antibiotic or Retinoid + BP or Retinoid + BP + Antibiotic	Topical Combination Therapy** BP + Antibiotic or Retinoid + BP or Retinoid + BP + Antibiotic -or- Oral Antibiotic + Topical Retinoid + BP -or- Oral Antibiotic + Topical Retinoid + BP + Topical Antibiotic	Oral Antibiotic + Topical Combination Therapy** BP + Antibiotic or Retinoid + BP or Retinoid + BP + Antibiotic -or- Oral Isotretinoin
Alternative Treatment	Add Topical Retinoid or BP (if not on already) -or- Consider Alternate Retinoid -or- Consider Topical Dapsone	Consider Alternate Combination Therapy -or- Consider Change in Oral Antibiotic -or- Add Combined Oral Contraceptive or Oral Spironolactone (Females) -or- Consider Oral Isotretinoin	Consider Change in Oral Antibiotic -or- Add Combined Oral Contraceptive or Oral Spironolactone (Females) -or- Consider Oral Isotretinoin

**Same same
but different**

**Skin
concerns
can manifest
differently
in skin
of color**



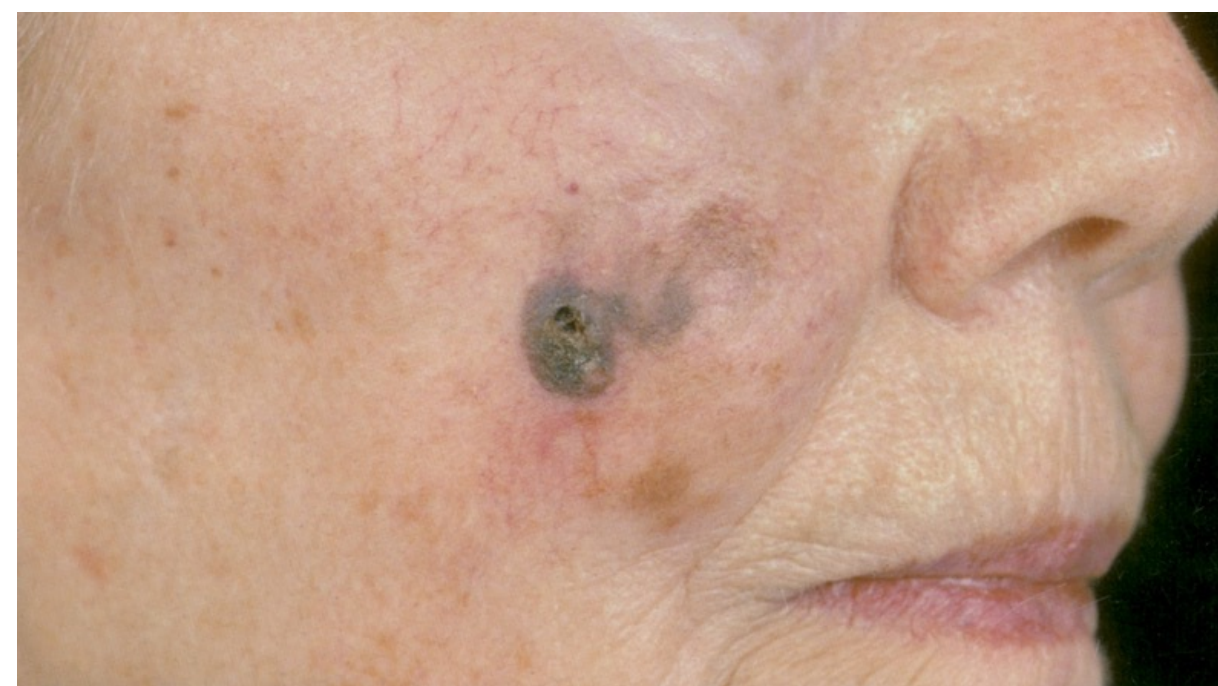
SEBORRHEIC DERMATITIS

**Skin
concerns
can manifest
differently
in skin
of color**



PSORIASIS

**Skin
concerns
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differently
in skin
of color**



MELANOMA

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When to see a derm:

- You have a skin condition that isn't responding to cosmetics and OTC drugs.
- You will benefit from in-office procedures.
- You have a persistent or recurrent rash.
- You have a skin lesion or wound that isn't healing
- You have a new spot or mole on your skin, a spot that looks different than all of your others or a mole that has changed size, shape or color.



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When to see a derm:

- You need to have something in your skin removed.
- You have a hair and nail condition.
- You have a skin/hair/nail condition that is rapidly progressing, or a stable condition that is currently in “flare” (e.g. psoriasis, eczema).
- Whenever you are in doubt



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**THANK
YOU**