



# Dermspeak: Unlocking the Lingo of Dermatologic Diagnoses

For Skin, Bones, Hearts, Private Parts Conference 2024

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- Thank you

# Learning Objectives

- Review the unique language used in dermatology to describe lesions and rashes including primary morphology, secondary changes, and distribution
- Understand when selected diagnostic tests and important historical features can assist in making a dermatologic diagnosis
- Describe the pathology behind several common dermatologic conditions
- Have fun reviewing basic dermatologic terminology and conditions using an interactive game-based modality

# Poll Everywhere



What word do you use most often in your medical documentation when describing a lesion or rash?

Nobody has responded yet.

Hang tight! Responses are coming in.



# Dermspeak: Unlocking the Lingo of Dermatologic Diagnoses

Win up to 1,000 points per answer

# Jeopardy Categories

## Jeopardy Board

Don't Forget the Nails

A Little Pathophysiology

I'd Like to Buy a Test

Distinctive Distributions

Primary Morphology

Historical Significance

# Main Jeopardy Board

End Game 

| Don't Forget the Nails | I'd Like to Buy a Test | Primary Morphology | A Little Pathology | Distinctive Distribution | Historical Significance |
|------------------------|------------------------|--------------------|--------------------|--------------------------|-------------------------|
| 100                    | 100                    | 100                | 100                | 100                      | 100                     |
| 200                    | 200                    | 200                | 200                | 200                      | 200                     |
| 300                    | 300                    | 300                | 300                | 300                      | 300                     |
| 400                    | 400                    | 400                | 400                | 400                      | 400                     |
| 500                    | 500                    | 500                | 500                | 500                      | 500                     |



# Don't Forget the Nails:

# 100

**The length of time needed to regrow a fingernail in an adult patient.**

The length of time needed to regrow a fingernail in an adult patient.

1 month

2 months

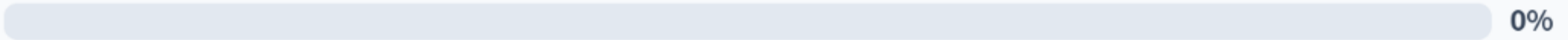
3 months

6 months

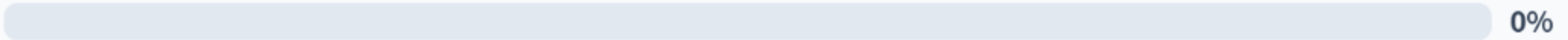
12 months

## The length of time needed to regrow a fingernail in an adult patient.

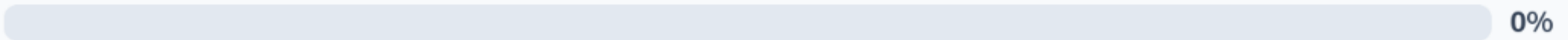
1 month



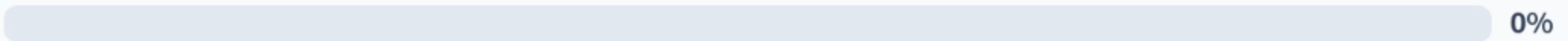
2 months



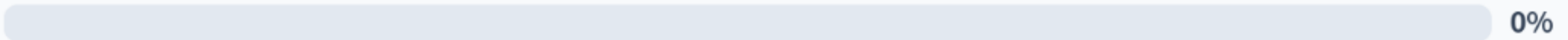
3 months



6 months



12 months



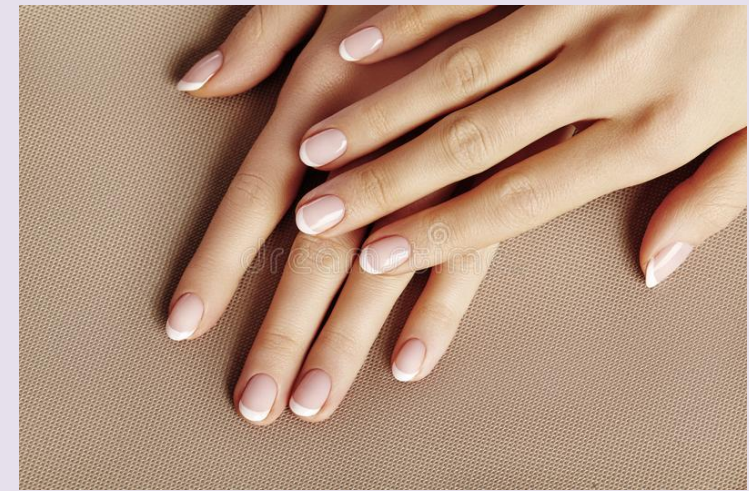
# Leaderboard

Nobody has responded yet.

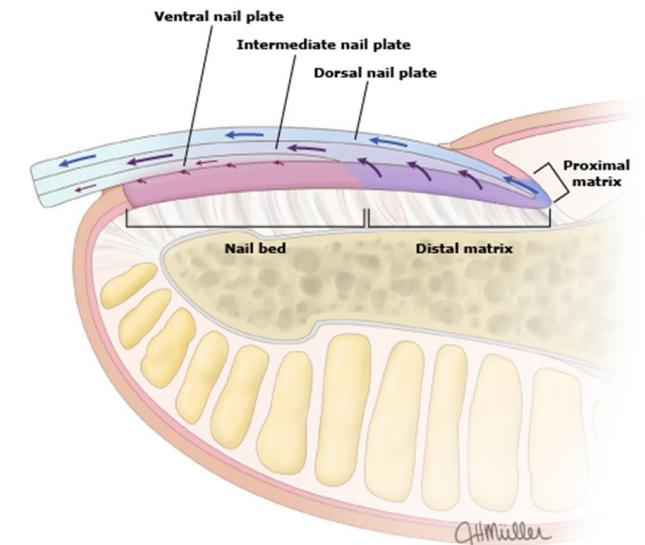


# Basic Nail Health

- Nail matrix is the germinative epithelium from which the nail matrix keratinocytes differentiate to form the nail plate
- Fingernail regrowth takes 6 months
- Toenail regrowth takes 12-18 months
- Nail growth slows with aging and in the presence of vascular disease and can be interrupted by systemic illness, trauma, or medications
- Skin diseases with nail involvement – psoriasis, lichen planus, alopecia areata, Darier disease, sarcoidosis
- Good nail habits
  - Keep nails trimmed short
  - Avoid trauma
  - Avoid contact irritants and wet work
  - Use nail cosmetics sparingly if at all
  - Protect hands from cold or windy weather



**Nail growth: Direction of matrix cell differentiation and movement**



UpToDate®

**BOARD**

# Don't Forget the Nails: 200



**Disruption of this part of the nail results in onycholysis.**

# Disruption of this part of the nail results in onycholysis.

Nail plate

Lunula

Hyponychium

Paronychium

Disruption of this part of the nail results in onycholysis.

Nail plate

0%

Lunula

0%

Hyponychium

0%

Paronychium

0%

# Leaderboard

Nobody has responded yet.



# Onycholysis

- Distal separation of the nail plate from the bed
- Onycholytic portion looks white due to air beneath the plate
- Associated with trauma, wet work, psoriasis, lichen planus, medications, onychomycosis, contact dermatitis
- Predisposes to secondary subungual infections



**BOARD**

# Don't Forget the Nails:

# 300

**Transverse grooves the result of temporary arrest of proximal nail matrix proliferation that move distally with nail growth.**



# Transverse grooves the result of temporary arrest of proximal nail matrix proliferation that move distally with nail growth.

Pitting

Physiologic furrows and ridges

Mees' lines

Splinter hemorrhages

Beau lines

Transverse grooves the result of temporary arrest of proximal nail matrix proliferation that move distally with nail growth.

Pitting

0%

Physiologic furrows and ridges

0%

Mees' lines

0%

Splinter hemorrhages

0%

Beau lines

0%

# Leaderboard

Nobody has responded yet.



# Beau Lines

- Result from temporary arrest of the proximal nail matrix proliferation and appear as transverse grooves that move distally with nail growth
- Can measure the time of insult with distance from proximal fold - @ one month for every mm from the fold
- Causes include trauma, local cutaneous disease such as dermatitis or paronychia, medications, viral infections, pemphigus, Kawasaki disease



**BOARD**

# Don't Forget the Nails: 400

**Cirrhosis of the liver is associated with this nail finding.**

Cirrhosis of the liver is associated with this nail finding.

Red lunula

Splinter hemorrhages

Longitudinal white lines

Terry's nails



## Cirrhosis of the liver is associated with this nail finding.

Red lunula

0%

Splinter hemorrhages

0%

Longitudinal white lines

0%

Terry's nails

0%

# Leaderboard

Nobody has responded yet.



# Terry Nails

- Leukonychia that involves more than the proximal 2/3 of the nail plate
- Distal 1/3 appears red
- Nail sign of systemic disease
  - Liver cirrhosis
  - Autoimmune hepatitis
  - T2DM
  - RA
  - Reactive arthritis
  - CHF



**BOARD**

# Don't Forget the Nails: 500

**This variant of melanoma presents in the nail beds often in higher Fitzpatrick skin types**

This variant of melanoma presents in the nail beds often in higher Fitzpatrick skin types

Lentigo maligna

Acral lentiginous

Nodular

Superficial spreading

## This variant of melanoma presents in the nail beds often in higher Fitzpatrick skin types

Lentigo maligna

0%

Acral lentiginous

0%

Nodular

0%

Superficial spreading

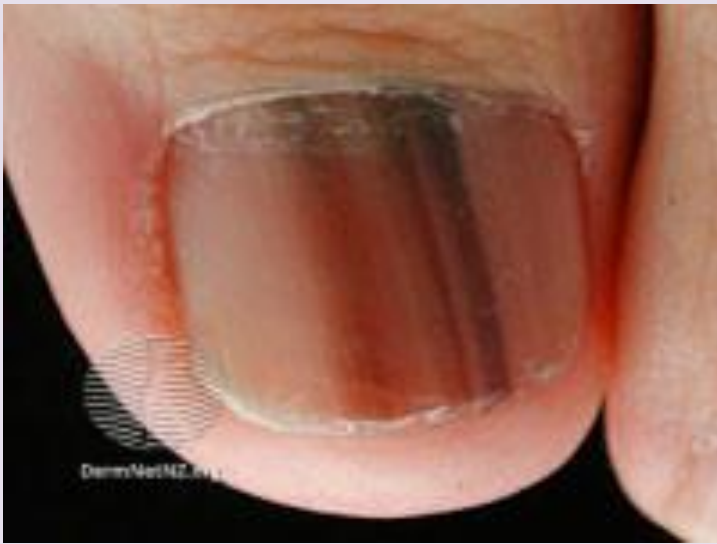
0%



# Leaderboard

Nobody has responded yet.





## Acral Lentiginous Melanoma

- Rare
  - 1-3% white
  - 15-30% occur in darker skin
- Brown-black longitudinal stripe in nail plate
- More common in higher Fitzpatrick types



**BOARD**

**I'd Like to Buy a  
Test: 100**

**What is the most common diagnostic testing method used in dermatologic diagnoses?**

## What is the most common diagnostic testing method used in dermatologic diagnoses?

Clinical presentation

Microscopy

Skin biopsy

Culture

Response to topical corticosteroid

## What is the most common diagnostic testing method used in dermatologic diagnoses?

Clinical presentation

0%

Microscopy

0%

Skin biopsy

0%

Culture

0%

Response to topical corticosteroid

0%

# Leaderboard

Nobody has responded yet.





**BOARD**

**I'd Like to Buy a  
Test: 200**

**Diagnostic test used to evaluate the erythematous and violaceous lesions of petechiae and purpura.**

Diagnostic test used to evaluate the erythematous and violaceous lesions of petechiae and purpura.

Wood's lamp

Skin-prick testing

Diascopy

Oil emersion dermoscopy

## Diagnostic test used to evaluate the erythematous and violaceous lesions of petechiae and purpura.

Wood's lamp

0%

Skin-prick testing

0%

Diascopy

0%

Oil emersion dermoscopy

0%

# Leaderboard

Nobody has responded yet.



# Diascopy



**BOARD**



**I'd Like to Buy a  
Test: 300**

**The presence of multi-nucleated giant cells on this diagnostic test is helpful in the diagnosis of cutaneous HSV.**

The presence of multi-nucleated giant cells on this diagnostic test is helpful in the diagnosis of cutaneous HSV.

Tzanck smear

Gram stain

Lugol's iodine wash

Acetowhitening

**The presence of multi-nucleated giant cells on this diagnostic test is helpful in the diagnosis of cutaneous HSV.**

Tzanck smear

Gram stain

Lugol's iodine wash

Acetowhitening

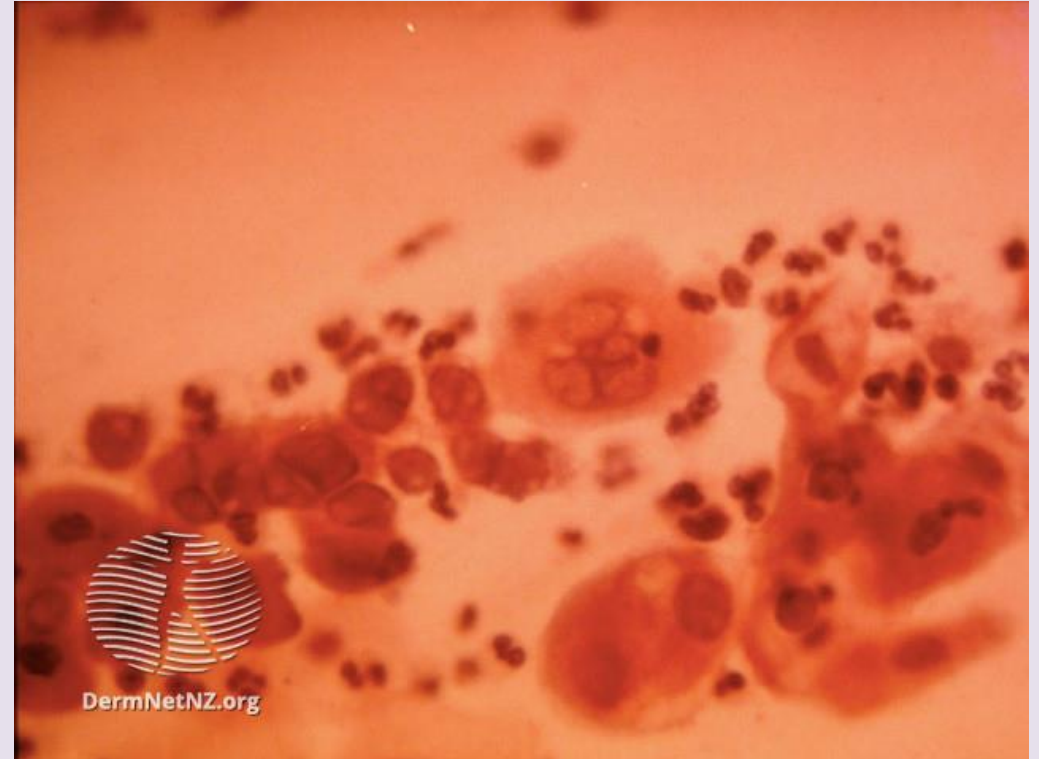
# Leaderboard

Nobody has responded yet.



# Tzanck Smear

- Most commonly used for diagnosis of herpes simplex and varicella-zoster
- Findings in HSV include multinucleated giant cells, acantholytic cells, keratinocyte ballooning, and nuclear molding
- Sensitivity 40-80%
- PCR is the most sensitive method to confirm HSV infection
- Also use Tzanck to see molluscum bodies in MC when clinical presentation is atypical or in immunocompromised patients to differentiate from deeper fungal infections



**BOARD**

**I'd Like to Buy a  
Test: 400**



**The dimple sign is positive in which of the following dermatologic conditions?**

The dimple sign is positive in which of the following dermatologic conditions?

Molluscum contagiosum

Verruca plantaris

Actinic keratosis

Dermatofibroma

## The dimple sign is positive in which of the following dermatologic conditions?

Molluscum contagiosum

0%

Verruca plantaris

0%

Actinic keratosis

0%

Dermatofibroma

0%

# Leaderboard

Nobody has responded yet.



# Dermatofibroma-Dimple Sign



**BOARD**

**I'd Like to Buy a  
Test: 500**

**Suturing of a punch biopsy is the preferred method for patient comfort, rapidity of healing and residual scarring beginning at what diameter?**



Suturing of a punch biopsy is the preferred method for patient comfort, rapidity of healing and residual scarring beginning at what diameter?

2 mm

4 mm

5 mm

8 mm

**Suturing of a punch biopsy is the preferred method for patient comfort, rapidity of healing and residual scarring beginning at what diameter?**

2 mm

4 mm

5 mm

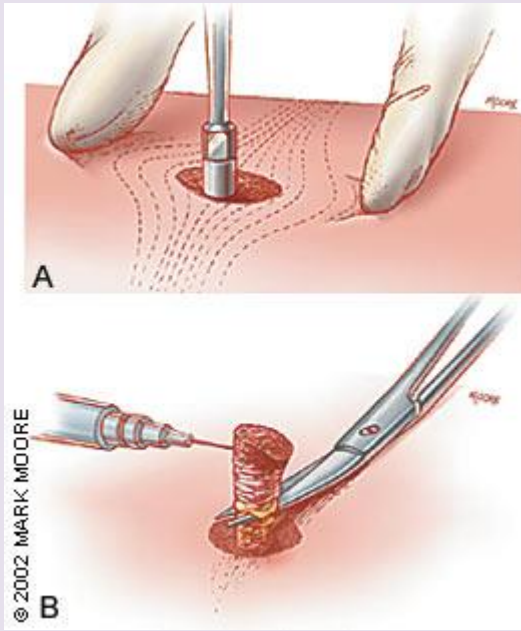
8 mm

# Leaderboard

Nobody has responded yet.







## Biopsy- Punch Biopsy



1)



2)



3)



4)



**BOARD**

**Primary**

**Morphology: 100**

**Flat hyperpigmentation less than 1 cm in diameter**



## Flat hyperpigmentation less than 1 cm in diameter

macule

patch

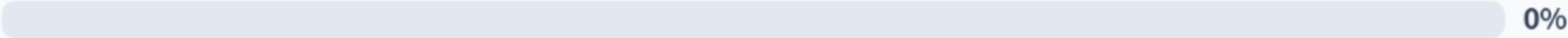
plaque

flare

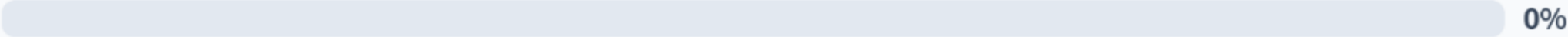
plaque

# Flat hyperpigmentation less than 1 cm in diameter

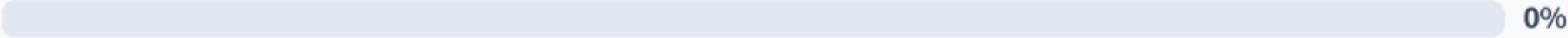
macule



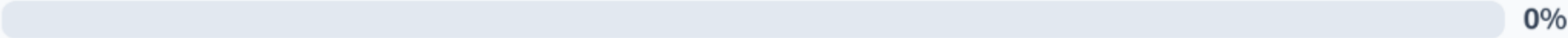
patch



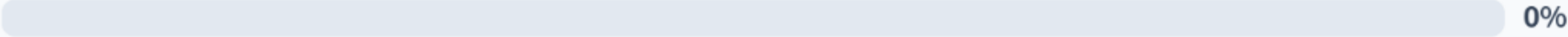
plaque



flare



plaque



# Leaderboard

Nobody has responded yet.



# Macules



**BOARD**

# Primary Morphology: 200

**This lesion is edematous with a erythematous periphery and clear center due to vasoconstriction.**

This lesion is edematous with a erythematous periphery and clear center due to vasoconstriction.

Wheal

Plateau

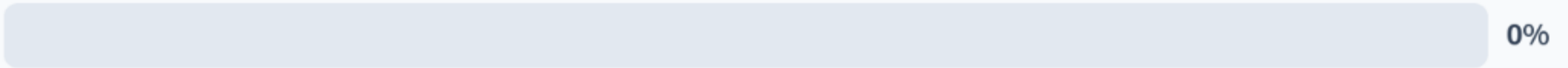
Excoriation

Plaque

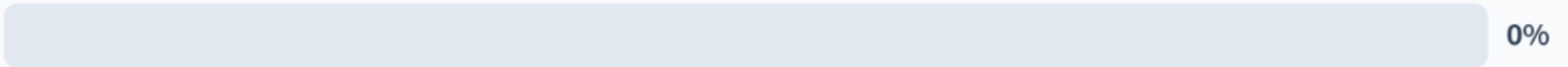


This lesion is edematous with a erythematous periphery and clear center due to vasoconstriction.

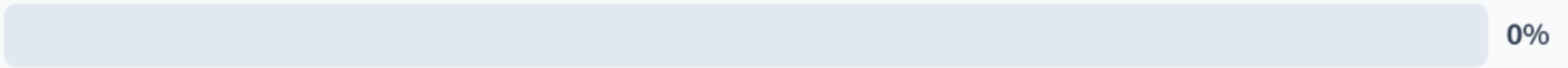
Wheal



Plateau



Excoriation



Plaque



# Leaderboard

Nobody has responded yet.





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**BOARD**

**Primary**

**Morphology: 300**

# Multiple lesions blending together

## Multiple lesions blending together

Excoriated

Confluent

Serpiginous

Annular

## Multiple lesions blending together

Excoriated

0%

Confluent

0%

Serpiginous

0%

Annular

0%



# Leaderboard

Nobody has responded yet.





DermNetNZ.org

**BOARD**

**Primary**

**Morphology: 400**

# Trauma to the skin that induces skin lesions

## Trauma to the skin that induces skin lesions

Nikolsky's sign

Lichenification

Koebnerization

Dennie-Morgan Lines

## Trauma to the skin that induces skin lesions

Nikolsky's sign

0%

Lichenification

0%

Koebnerization

0%

Dennie-Morgan Lines

0%

# Leaderboard

Nobody has responded yet.







**BOARD**

**Primary**

**Morphology: 500**

**Vasculitis often produces these lesions**

## Vasculitis often produces these lesions

Flaccid bullae

Wheals and flares

Palpable purpura

Erythema migrans

Collarette scales

## Vasculitis often produces these lesions

Flaccid bullae

0%

Wheals and flares

0%

Palpable purpura

0%

Erythema migrans

0%

Collarette scales

0%

# Leaderboard

Nobody has responded yet.







# Describing a Rash: Primary Lesions

- Macule/Patch – Flat, non-palpable lesion
- Papule/Nodule – Raised lesion
- Plaque – A plateau-like lesion, confluent papules
- Vesicle/Bulla – Circumscribed, elevated lesion containing fluid
- Pustule – Elevated lesion containing pus
- Wheal – Transient, elevated, edematous lesion often with clearing in center
- Maculopapular – Some flat, some raised
- Target/Iris – Concentric circles, different colors or levels

# Describing a Rash: Secondary Changes

- Lichenification - Thickened skin with distinct borders
- Crusted - Hard and rough surface caused by dried sebum, exudate, blood, or necrotic tissue
- Scaly - Heaped up horny epithelium, flaky
- Macerated - Increase in water content, soggy
- Fissure - Thin, linear erosion or ulcer
- Atrophy - Loss of skin or tissue, thinning, shiny
- Excoriated - Shallow hemorrhagic excavation, linear or punctate, from scratching
- Erosion - Partial break in epidermis
- Ulcer - Full thickness loss of the epidermis

**BOARD**

# **A Little Pathophysiology: 100**

**Epidermal hyperplasia results in scaly plaques**

## Epidermal hyperplasia results in scaly plaques

Psoriasis vulgaris

Melasma

Granuloma annulare

Atopic dermatitis

## Epidermal hyperplasia results in scaly plaques

Psoriasis vulgaris

0%

Melasma

0%

Granuloma annulare

0%

Atopic dermatitis

0%

# Leaderboard

Nobody has responded yet.







**BOARD**

# **A Little Pathophysiology: 200**

# **Inflammatory condition of the face associated with telangiectasias and Demodex infestation**

## Inflammatory condition of the face associated with telangiectasias and Demodex infestation

Rosacea

Scabies

Acne vulgaris

Discoid lupus

# Inflammatory condition of the face associated with telangiectasias and Demodex infestation

Rosacea

Scabies

Acne vulgaris

Discoid lupus

# Leaderboard

Nobody has responded yet.







**BOARD**

# **A Little Pathophysiology: 300**

# Autoimmune subepidermal blistering disease

## Autoimmune subepidermal blistering disease

bullous pemphigoid

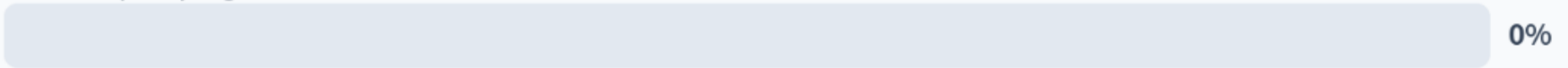
pemphigus vulgaris

bullous impetigo

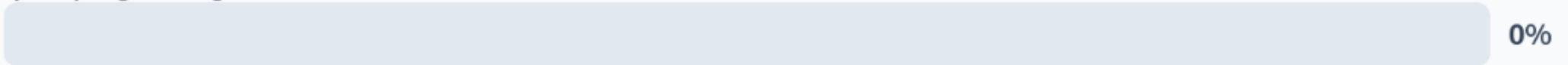
erythema multiforme

## Autoimmune subepidermal blistering disease

bullous pemphigoid



pemphigus vulgaris



bullous impetigo



erythema multiforme



# Leaderboard

Nobody has responded yet.





**BOARD**



# **A Little Pathophysiology: 400**

**Type IV, cell-mediated delayed hypersensitivity reaction of the skin.**

## Type IV, cell-mediated delayed hypersensitivity reaction of the skin.

Allergic contact dermatitis

Atopic dermatitis

Irritant contact dermatitis

Urticaria



# Leaderboard

Nobody has responded yet.





**BOARD**

# **A Little Pathophysiology: 500**



# **Activation of insulin-growth factor receptors on keratinocytes leading to keratinocyte and dermal fibroblast proliferation**

## Activation of insulin-growth factor receptors on keratinocytes leading to keratinocyte and dermal fibroblast proliferation

Pityriasis rosea

Acanthosis nigricans

Pityriasis alba

Vitiligo

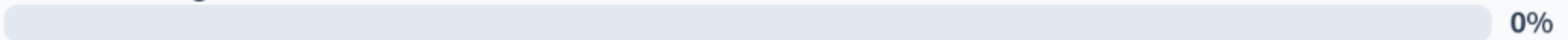
Melasma

## Activation of insulin-growth factor receptors on keratinocytes leading to keratinocyte and dermal fibroblast proliferation

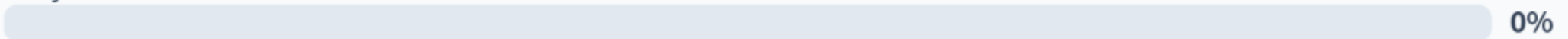
Pityriasis rosea



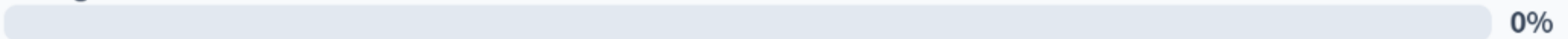
Acanthosis nigricans



Pityriasis alba



Vitiligo



Melasma



# Leaderboard

Nobody has responded yet.





**BOARD**

# Distinctive Distribution: 100

**Coxsackie virus presents as a pediatric rash on palms, soles, around the mouth, and in which other typical location?**



Coxsackie virus presents as a pediatric rash on palms, soles, around the mouth, and in which other typical location?

Intertriginous areas

External ear canal

Conjunctiva

Buttocks

Coxsackie virus presents as a pediatric rash on palms, soles, around the mouth, and in which other typical location?

Intertriginous areas

0%

External ear canal

0%

Conjunctiva

0%

Buttocks

0%

# Leaderboard

Nobody has responded yet.





<https://www.consultant360.com/article/consultant360/eczema-coxsackium>

**BOARD**

# **Distinctive Distribution: 200**

**Erythematous maculopapular eruption that starts at the base of the scalp and proceeds downward.**

Erythematous maculopapular eruption that starts at the base of the scalp and proceeds downward.

Measles

Rocky Mountain Spotted Fever

Secondary syphilis

Exanthem subitum



Erythematous maculopapular eruption that starts at the base of the scalp and proceeds downward.

Measles

0%

Rocky Mountain Spotted Fever

0%

Secondary syphilis

0%

Exanthem subitum

0%

# Leaderboard

Nobody has responded yet.





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DermNetNZ.org

**BOARD**

# **Distinctive Distribution: 300**

**This common skin condition often presents in a dribble-down pattern on the anterior and posterior trunk and consists of fawn-colored slightly scaly macules.**

This common skin condition often presents in a dribble-down pattern on the anterior and posterior trunk and consists of fawn-colored slightly scaly macules.

Polymorphus skin eruption

Pityriasis alba

Tinea incognito

Tinea versicolor

This common skin condition often presents in a dribble-down pattern on the anterior and posterior trunk and consists of fawn-colored slightly scaly macules.

Polymorphus skin eruption

0%

Pityriasis alba

0%

Tinea incognito

0%

Tinea versicolor

0%



# Leaderboard

Nobody has responded yet.





**Figure 13-71** Tinea versicolor. The most common presentation with thin fawn-colored scaling papules on the upper chest.



**BOARD**

**Distinctive  
Distribution:  
400**

**This scaly rash presents commonly in the nasolabial folds  
and behind the ears.**

This scaly rash presents commonly in the nasolabial folds and behind the ears.

Seborrheic dermatitis

Systemic lupus erythematosus

Rosacea

Peri-orificial dermatitis

This scaly rash presents commonly in the nasolabial folds and behind the ears.

Seborrheic dermatitis

0%

Systemic lupus erythematosus

0%

Rosacea

0%

Peri-orificial dermatitis

0%



# Leaderboard

Nobody has responded yet.





DermNetNZ.org



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**BOARD**

# **Distinctive Distribution: 500**

**This hypersensitivity reaction often produces targetoid lesions on the palms, soles and mucous membranes.**

**This hypersensitivity reaction often produces targetoid lesions on the palms, soles and mucous membranes.**

erythema multiforme

erythema marginatum

erythema nodosum

urticaria

This hypersensitivity reaction often produces targetoid lesions on the palms, soles and mucous membranes.

erythema multiforme

0%

erythema marginatum

0%

erythema nodosum

0%

urticaria

0%

# Leaderboard

Nobody has responded yet.



| Rank | Score       |
|------|-------------|
| 1    | Low         |
| 2    | Medium-Low  |
| 3    | High        |
| 4    | Medium      |
| 5    | Medium-High |





**BOARD**

**Historical  
Significance:  
100**

**What symptom will help distinguish urticarial vasculitis from regular urticaria?**

## What symptom will help distinguish urticarial vasculitis from regular urticaria?

pain

pruritus

distal than central distribution

presence of redness

## What symptom will help distinguish urticarial vasculitis from regular urticaria?

pain

0%

pruritus

0%

distal than central distribution

0%

presence of redness

0%

# Leaderboard

Nobody has responded yet.







**BOARD**

# Historical Significance: 200

**A disseminated rash that worsens with fever and fades when fever subsides in a cyclic daily fashion**

A disseminated rash that worsens with fever and fades when fever subsides in a cyclic daily fashion

juvenile idiopathic arthritis

roseola

malaria

secondary syphilis

erythema marginatum

## A disseminated rash that worsens with fever and fades when fever subsides in a cyclic daily fashion

juvenile idiopathic arthritis

0%

roseola

0%

malaria

0%

secondary syphilis

0%

erythema marginatum

0%

# Leaderboard

Nobody has responded yet.





**BOARD**



# Historical Significance: 300

# Grouped skin lesions with intense nocturnal pruritus



## Grouped skin lesions with intense nocturnal pruritus

erythema multiforme

0%

scabies

0%

herpes zoster

0%

pityriasis rosea

0%

# Leaderboard

Nobody has responded yet.





**BOARD**

# Historical Significance: 400



**This skin condition presents with pain out of proportion to the localized erythema or edema**

# **This skin condition presents with pain out of proportion to the localized erythema or edema**

Osler nodes

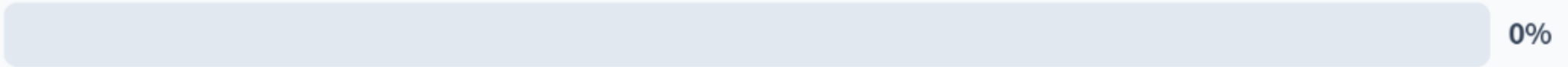
Necrotizing fasciitis

Erysipelas

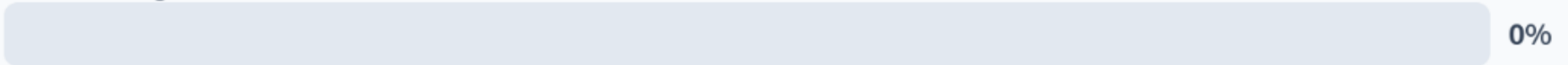
Erythrasma

This skin condition presents with pain out of proportion to the localized erythema or edema

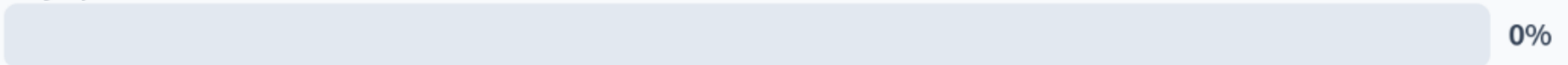
Osler nodes



Necrotizing fasciitis



Erysipelas



Erythrasma



# Leaderboard

Nobody has responded yet.





**BOARD**

# Historical Significance: 500

**A skin condition that presents with prodromal cutaneous  
hypesthesia**



## A skin condition that presents with prodromal cutaneous hypesthesia

Orolabial herpes

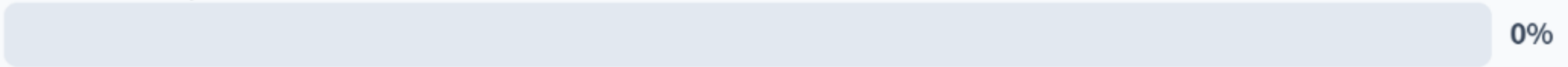
Tinea versicolor

Pityriasis rosea

Allergic contact dermatitis

## A skin condition that presents with prodromal cutaneous hypesthesia

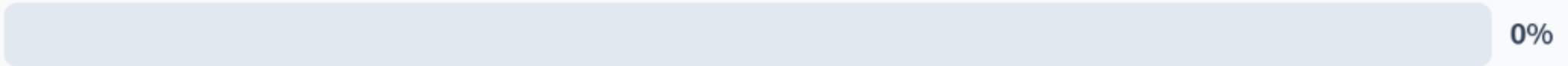
Orolabial herpes



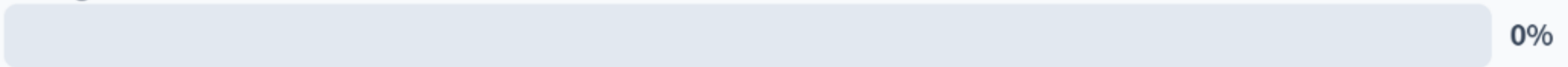
Tinea versicolor



Pityriasis rosea



Allergic contact dermatitis



# Leaderboard

Nobody has responded yet.





**BOARD**

# A Few Good Resources

- Images – <http://www.dermnetnz.org>
- UTD – Approach to the clinical dermatologic diagnosis
  - [https://www.uptodate.com/contents/approach-to-the-clinical-dermatologic-diagnosis?search=dermatology%20terms&source=search\\_result&selectedTitle=1~150&usage\\_type=default&display\\_rank=1](https://www.uptodate.com/contents/approach-to-the-clinical-dermatologic-diagnosis?search=dermatology%20terms&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1)
- VisualDx – skin of color atlas <https://www.visualdx.com/>
- Global Skin Atlas <http://www.globalskinatlas.com/searchdiag.cfm>
- Fitzpatrick's Color Atlas & Synopsis of Clinical Dermatology
  - Wolff K, Johnson RA, McGraw Hill
- Clinical Dermatology, 5<sup>th</sup> Ed – online and print
  - Habif T, Mosby

# References

- Christenson LJ et al, Primary closure vs second-intention treatment of skin punch biopsy sites. Arch Dermatol;vol 141, Sept 2005. Accessed at [www.archdermatol.com](http://www.archdermatol.com) on May 31, 2023.