

# Which “itis” is it? Deciphering Dermatitis Dilemmas

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# Disclosures

- Topic Expert AAPA Atopic Dermatitis 2017-2019
- The France Foundation – consultant in dermatology and atopic dermatitis
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# Learning Objectives

At the end of this session, participants should be able to:

- Develop an approach to differentiating the common dermatitis presentations including atopic, contact, seborrheic and stasis and other conditions that may present similarly to these
- Recognize and describe the primary morphology and distribution of the dermatitis presentations
- List the common complications and secondary skin changes that occur with dermatitis presentations
- Recommend initial treatment and provide patient education about daily management and skin care for dermatitis presentations

# Hmmm...“I see you have a rash”

- What is dermatitis?
  - A very common dermatologic diagnosis with multiple etiologies
- Rash for a “reason”
  - Inflammatory
  - Infectious
  - Infestation
  - Genetic, immunodeficiency, malignancy
- Signs
  - Erythema, inflammation
  - Papules, vesicles
  - Scaling, excoriation, lichenification
- Symptoms
  - Pruritus is common, but maybe some burning or irritation

# Middle-Aged Female with a Facial Rash

- A 46-year-old female presents with a 3-year history of a facial rash comprised of redness and flaking with minimal if any itching.
- It worsens in the winter and shows improvement in spring and early fall.
- It has not improved with the use of facial moisturizer.
- She denies exacerbation with sun, wind, or alcohol use.
- Her PMH is significant for unipolar major depression with seasonal exacerbation that is well managed with sertraline 50 mg daily.

# What is the most likely diagnosis?

- A. Perioral dermatitis
- B. Acne vulgaris
- C. Seborrheic dermatitis
- D. Rosacea
- E. Atopic dermatitis

# Answer Analysis

- A. Perioral dermatitis – non-itchy erythematous papules and pustules in the perioral area sparing the vermilion border only, topical steroid use typically precedes, treated with oral or topical antimicrobials
- B. Acne vulgaris – comedones, papules/pustules, pubertal onset
- C. Seborrheic dermatitis – CORRECT ANSWER - nasolabial folds classic distribution with erythema and scaling predominating, other locations include any hairy area, behind ears, in diaper area**
- D. Rosacea – erythema, telangiectasia, cheeks and nose, flushing, triggers
- E. Atopic dermatitis – childhood onset, atopic conditions in history or family, dry skin, itching, facial presentation most common in pts < 2 years

**If present in our patient, which of the following could be associated with a more florid or severe disease presentation?**

- A. Poor skin hygiene
- B. IgE-mediated food allergy
- C. Neurofibromatosis Type I
- D. Parkinson disease
- E. Systemic lupus erythematosus



# Answer Analysis

- A. Poor skin hygiene – excess sebum is not related to hygiene
- B. IgE-mediated food allergy – related to atopic dermatitis, not seborrheic dermatitis
- C. Neurofibromatosis Type I – associated with several skin findings such as café-au-lait macules and patches, inguinal freckling and neurofibromas, unrelated to seborrheic dermatitis
- D. Parkinson disease – CORRECT ANSWER – may be related to dopamine excess or overgrowth of yeast, HIV infection also results in more severe presentations**
- E. Systemic lupus erythematosus – unrelated, but does have classic skin findings with systemic symptoms

# Distinguishing this Dermatitis: **Seborrheic Dermatitis**

- Inflammatory response to *Malassezia* yeast which lives on lipid-rich sebaceous gland secretions
- Commonly affects 3 different groups of patients – first 3 months, puberty, 40-60 years
- At-risk patients: immunosuppression (HIV), neurological conditions (Parkinson), psychiatric diseases, genetics
- **Lesions**: erythematous patches with greasy scales or flaking, in darker skin it can present as hypopigmentation
- **Distribution**: scalp, hairline, eyebrows/lashes, central face, nasolabial folds, EAC, behind the ear

# Dealing with this Dermatitis: **Seborrheic Dermatitis**

- Treatment

- topical corticosteroids (desonide)
- topical calcineurin inhibitors (pimecrolimus)
- topical lithium
- topical antifungals (ciclopirox, ketoconazole)

# **Pediatric Patient with an Itchy Body Rash**

**An 8-year-old African American male presents for evaluation of the following intensely itchy skin lesions. His skin reveals general xerosis and his mother reports episodic flares like today's presentation in the antecubital fossa and popliteal fossa. How would you describe these skin lesions?**

- A. Erythematous plaques with silver scale
- B. Scattered erythematous papules with lichenification
- C. Weepy clustered vesicles with excoriation
- D. Erythematous patches with yellow greasy scale

# Answer Analysis

- A. Erythematous plaques with silver scale – typical of psoriasis, especially on extensor surfaces
- B. Scattered erythematous papules with lichenification –  
CORRECT ANSWER**
- C. Weepy clustered vesicles with excoriation – may present in patients with atopic dermatitis, but more acutely, also seen in herpetic infections or acute contact dermatitis
- D. Erythematous patches with yellow greasy scale – typical of seborrheic dermatitis

**Examination of this patient's hands is likely to reveal which of the following?**

- A. Hyper linearity
- B. Auspitz sign
- C. Dennie-Morgan folds
- D. Pitting of the nails

# Answer Analysis

- A. Hyper-linearity – CORRECT ANSWER – associated findings in atopic dermatitis include increased linearity on palms, Dennie-Morgan folds under eyes, pityriasis alba, pigment changes in darker skin**
- B. Auspitz sign – pinpoint bleeding under psoriatic plaques
- C. Dennie-Morgan folds – beneath the eyes of atopic patients
- D. Pitting of the nails – seen in many conditions including psoriasis, other autoimmune states

**Examination of the posterior aspect of this patient's arm reveals the following. What is the name of this dermatologic condition that is often seen in patients with atopic dermatitis?**

- A. Ichthyosis vulgaris
- B. Keratosis pilaris
- C. Pityriasis alba
- D. Koebnerization



# Answer Analysis

- A. Ichthyosis vulgaris – thickened, dry skin
- B. Keratosis pilaris – CORRECT ANSWER – can assist in the characterization of a patient with AD**
- C. Pityriasis alba – hypopigmented oval or round patches typically on the face, common in pts with AD
- D. Koebnerization – trauma inducing lesions, associated with many dermatological conditions including psoriasis, lichen planus

**A 5-year-old patient with atopic dermatitis presents with a flare involving the face and antecubital fossa. She has been using topical triamcinolone and moisturizer without improvement for 3 days. What additional management is appropriate for this patient at this time?**

- A. Oral cephalexin
- B. Oral cetirizine
- C. Topical clobetasol
- D. Topical neomycin

# Answer Analysis

- A. Oral cephalexin – CORRECT ANSWER – secondary *Staph* infections are common in pts with AD and can be differentiated from flares by the presence of the honey-colored crusting, extensive presentations like this need oral abx and not just topical
- B. Oral cetirizine – antihistamine would help with associated allergic rhinitis and be mildly sedating if itching at night was a problem
- C. Topical clobetasol – super high potency topical corticosteroid, not appropriate for facial application
- D. Topical neomycin – topical antimicrobial used in wound management, very sensitizing, topical mupirocin or retapamulin for limited impetigo

## Distinguishing this Dermatitis: **Atopic Dermatitis**

- Chronic inflammatory skin condition caused by a genetic defect in the filaggrin protein leading to antigen presentation to the dermis resulting in **itching** and subsequent inflammation
- Can be part of the allergic triad (IgE-mediated) with allergies, asthma and atopic dermatitis
- Onset generally before 2 years of age
- 3 clinical phases: acute (vesicular, weeping, crusting), subacute (dry, scaly, erythematous papules and plaques), chronic (lichenification)
- Distribution on the faces of infants, and flexor surfaces in children
- Associated findings: hyper-linearities of palms, Dennie-Morgan lines, keratosis pilaris, pityriasis alba, secondary bacterial or viral infections, subtypes – nummular, dyshidrotic

# Dealing with this Dermatitis: **Atopic Dermatitis**

- Emollients and bathing
- Topical corticosteroids
- Topical calcineurin inhibitors
- Topical phosphodiesterase inhibitors
  
- Wet wraps
- Bleach baths
  
- Systemic therapies – cyclosporine, dupilimab (6 yrs and up)

# Teenager with a Running Rash

- **An 18-year-old female cross-country runner presents for evaluation of a diffuse and pruritic rash.**
- **It began on the forearms 3-4 days ago as shown several hours after taking a run with her dog on a wooded trail, but has since spread to the face, neck and torso.**
- **The patient denies exposure to any new products, foods, or any change in her routine.**

## How would you describe this rash?

- A. Scattered erythematous papules and pustules on the forearm
- B. Tense bullae on an erythematous base
- C. Salmon patches with excoriation on the distal arm
- D. Linear vesicles on an erythematous base with scattered papules
- E. Monomorphus grouped vesicles with crusting

# Answer Analysis

- A. Scattered erythematous papules and pustules on the forearm – lesions are not scattered and there are no visible pustules
- B. Tense bullae on an erythematous base – bullae are larger than 0.5-1 cm
- C. Salmon patches with excoriation on the distal arm – patches are flat
- D. Linear vesicles on an erythematous base with scattered papules – CORRECT ANSWER**
- E. Monomorphus grouped vesicles with crusting – these are linear and not grouped vesicles



# What is the most likely diagnosis?

- A. Erythema multiforme
- B. Lichen simplex chronicus
- C. Allergic contact dermatitis
- D. Irritant contact dermatitis
- E. Urticarial vasculitis

# Answer Analysis

- A. Erythema multiforme – delayed hypersensitivity reaction, target lesions, palms and soles, mucous membrane involvement, HSV, medications
- B. Lichen simplex chronicus – isolated, well-demarcated plaque secondary to repeated scratching
- C. Allergic contact dermatitis – CORRECT ANSWER**
- D. Irritant contact dermatitis – more insidious onset, borders less discrete, contact is usually chemical, detergent or water, area of rash limited to area of exposure without diffuse spread
- E. Urticarial vasculitis – pruritic wheals and hives that become dusky and bruise-like, more systemic/organ involvement, not associated with exposure, can become chronic, angioedema and purpura prominent

**What type of reaction is most likely responsible for this patient's presentation?**

- A. This is a non-immune mediated dermatitis
- B. Type I
- C. Type II
- D. Type III
- E. Type IV

Oh, no, I thought this was DERMATOLOGY not IMMUNOLOGY!  
Yikes...

# Answer Analysis

- A. This is a non immune mediated dermatitis – associated with irritant contact dermatitis
- B. Type I – Immediate hypersensitivity, IgE-mediated, urticarial/anaphylaxis
- C. Type II – Antibody-mediated cytotoxic or cytolytic reactions, transfusion reactions, hemolytic disease of the newborn
- D. Type III – Immune complex-mediated, serum sickness, urticarial vasculitis
- E. Type IV – CORRECT ANSWER- T cell-mediated, delayed hypersensitivity**

**What allergen is most likely responsible for this waistline, localized contact dermatitis presentation?**

- A. Laundry detergent
- B. Nickel
- C. Bleach
- D. Rubber/Latex
- E. Topical Neosporin

# Answer Analysis

- A. Laundry detergent – clothing with restrictive contact – socks, undershirts
- B. Nickel – CORRECT ANSWER – buckles, jewelry, can lead to “id” reaction**
- C. Bleach – hands, occupational exposure
- D. Rubber/Latex - undergarments
- E. Topical neomycin – under dressings, wound care

This distribution of this rash helps to narrow down the exposure possibilities.

# The diagnostic test of choice for allergic contact dermatitis is which of the following?

- A. Epicutaneous patch testing
- B. Serum total IgE
- C. Serum IgE to specific allergens
- D. Skin prick testing
- E. Intradermal testing

# Answer Analysis

- A. **Epicutaneous patch testing – CORRECT ANSWER – potential allergens applied to surface of skin and left on for 48-72 hours and then removed, read at removal and a week later**
- B. Serum total IgE – used for IgE-mediated allergy testing in the setting of interpreting specific allergens
- C. Serum IgE to specific allergens – preferred method for IgE testing when patient is unable to hold antihistamines and in the setting of determining if oral challenge may be safe
- D. Skin prick testing – initial method of choice for IgE-mediated allergies in the office setting
- E. Intradermal testing – IgE-mediated allergies, more specific/quantified compared to skin prick, can induce anaphylaxis



# Which of the following would be the most appropriate management the runner with Rhus ACD?

- A. Methylprednisolone dose pack
- B. Prednisone 40 mg per day for 4 days then 20 mg per day for 4 days and then 10 mg for 4 days
- C. Topical pimecrolimus 1% cream twice daily for 7 days
- D. Topical mometasone cream four times daily to affected areas for 7 days
- E. Cetirizine 10 mg twice daily for 7-10 days

# Answer Analysis

- A. Methylprednisolone dose pack – 6 day dosing tapers too quickly and may lead to relapse
- B. Prednisone 40 mg per day for 4 days then 20 mg per day for 4 days and then 10 mg for 4 days – CORRECT ANSWER – go strong enough and long enough**
- C. Topical pimecrolimus 1% cream – topical calcineurin inhibitors – ineffective for the treatment of *Toxicodendron*-induced dermatitis
- D. Topical mometasone cream 0.1% – topical corticosteroids are generally not helpful after vesicles have developed and a higher potency would be required, TC usually dosed twice daily
- E. Cetirizine 10 mg – not used in treatment as itching is not a histamine problem, if needed for sedation, an older generation would be more appropriate

# Distinguishing this Dermatitis: **Contact Dermatitis**

- Refers to any dermatitis after direct skin exposure
- Two types – allergic (20%) and irritant (80%)
- Allergic contact dermatitis (ACD) is a delayed hypersensitivity reaction (IV-cell mediated) which usually produces a more dramatic dermatitis with bizarre patterns, pruritus is intense, nickel and urushiol most common, epicutaneous patch testing can confirm diagnosis
- ACD treated with topical or oral corticosteroids, > 10% BSA consider prednisone 40-60 mg with taper for at least 10 days
- Irritant contact dermatitis (ICD) is caused by direct physical or chemical injury to the epidermis, more insidious onset, less defined borders, hands very common location, water and cleansers are common irritants
- ICD treated with barrier restoration, topical corticosteroids
- Avoidance is key in management of both types

# **Older Adult Patient with Leg Rash**

- A 68-year-old female with a BMI of 28 presents for evaluation of this skin rash with mild tenderness and itching of the lower extremities and concomitant 1+pitting edema for many months.**
- She has a history of hypertension, dyslipidemia and T2DM.**
- She denies trauma, use of new products or fever/chills.**

**Which of the following is the most likely diagnosis?**

- A. Cellulitis
- B. Erysipelas
- C. Irritant contact dermatitis
- D. Necrobiosis lipoidicus
- E. Stasis dermatitis

# Answer Analysis

- A. Cellulitis – develops over hours to days, painful expanding area or erythema, Staph and Strep gain access through portals of entry in skin such as maceration of toes or insect bites, almost always unilateral
- B. Erysipelas – cellulitis involving more superficial skin and lymphatics, bright red, sharply marginated, peau d' orange edema, fever and lymphadenopathy may be present
- C. Irritant contact dermatitis – looks like an “outside job”, patterns are geometric not anatomic, pain and burning more typical than pruritus, chemical or detergent exposure
- D. Necrobiosis lipoidicus – rare, commonly associated with T1DM, painless, small, red-brown papules enlarging to plaques on shins, become yellow-brown and atrophic with telangiectasia, Koebner phenomena
- E. **Stasis dermatitis – CORRECT ANSWER - slow development over weeks, pruritus predominates, scale is present, accumulation of hemosiderin can give the legs a speckled, rusty brown color, distribution mid-shin/calf to ankle**

**Which of the following is the best choice to confirm your suspected diagnosis?**

- A. Duplex ultrasound
- B. Punch biopsy
- C. Patch testing
- D. CBC with differential

# Answer Analysis

- A. Duplex ultrasound – CORRECT ANSWER –use to confirm the chronic venous insufficiency leading to stasis dermatitis**
- B. Punch biopsy – not specific for underlying cause and may be difficult to get to heal in this setting
- C. Patch testing – for allergic contact dermatitis
- D. CBC with differential – if cellulitis was a concern, may be helpful



**The most definitive therapy for this patient is which of the following?**

- A. Topical emollients after gentle soap-free cleansing
- B. Modification of hypertension medication and addition of diuretic
- C. Wet dressings
- D. Compression stockings
- E. Laser therapy for pigment changes

## Answer Analysis

- A. Topical emollients after gentle soap-free cleansing – good general measure for stasis dermatitis to help keep the skin intact
- B. Modification of hypertension medication and addition of diuretic – edema not related to BP or CHF, would not improve much with this therapy
- C. Wet dressings – use for wet, oozing skin, or on skin that is highly pruritic or vesicular to desiccate it
- D. Compression stockings – CORRECT ANSWER – helps to bring venous flow back up from the legs and assist the faulty valves**
- E. Laser therapy for pigment changes – hemosiderin deposits may lighten, but overall cause not ameliorated so would return

## Distinguishing this Dermatitis: **Stasis Dermatitis**

- Typically occurs on lower extremities in patients with chronic venous insufficiency
- Skin changes: edema, hyperpigmentation, varicosities, erythematous, scaling, eczematous patches or plaques, fibrosis, atrophy, ulceration
- Medial ankle most frequently and severely involved, usually extends up to the knee, most often bilateral
- Can be complicated by contact dermatitis – bandages/dressings, topical antibiotics and corticosteroids, rubber
- Superinfections may occur – impetiginized lesions, cellulitis
- Treatment of the underlying venous insufficiency is key, other measures include gentle cleansing, emollients, topical corticosteroids

**A 21-year-old female presents with a waxing and waning rash around her mouth for the past 2-3 years. She states that it improves with topical corticosteroid use, but then flares upon cessation. What is the most likely diagnosis for this patient presentation?**

- A. Contact dermatitis
- B. Acne vulgaris
- C. Rosacea
- D. Perioral dermatitis
- E. Systemic lupus erythematosus

# Answer Analysis

- A. Contact dermatitis – search for new exposures limited to contact areas, generally improved with topical corticosteroids without flare at cessation
- B. Acne vulgaris – starts in adolescence, comedones will be present along with inflammatory lesions
- C. Rosacea – typically presents between 30-60 years, flushing, telangiectasia, triggers such as wind, sun or foods
- D. Perioral dermatitis – CORRECT ANSWER - 90% occur in women between 16-45 years, triggered by topical or inhaled corticosteroids, fluorinated toothpastes, heavy moisturizers, lipsticks, peri-orifical distribution sparing vermilion border, clusters of papules/pustules with little or no scale**
- E. Systemic lupus erythematosus – systemic symptoms, malar distribution to rash in a butterfly pattern sparing the upper lip and nasolabial fold, triggered by sun exposure, ocular involvement common

# Distinguishing this Dermatitis: **Perioral Dermatitis**

- Also known as periorificial dermatitis
- Frequently affects women between 16-45 years of age
- Topical corticosteroid use is often reported, especially withdrawal leading to exacerbations
- Skin lesions present as 1-2 mm erythematous papules, pustules, or vesicles with mild scale (if any), absence of comedones
- Perioral area most common, sparing vermilion border, but peri-nasal and -ocular presentations do occur
- Generally asymptomatic, but mild burning/stinging has been reported
- Tx – d/c topical corticosteroids usually with taper, substitute topical calcineurin inhibitors, topical erythromycin/metronidazole, oral tetracyclines in pts over 8 years of age

# Male Patient with a Circle Rash on Thigh

- **A 36-year-old male presents with a 2-year history of a circumscribed pruritic plaque on the lateral aspect of the left thigh.**
- **The plaque is thickened, with exaggeration of the normal skin markings.**
- **He has a history of seasonal allergic rhinitis and exercise-induced asthma.**

# What is the most likely diagnosis?

- A. Fixed drug eruption
- B. Psoriasis
- C. Lichen planus
- D. Lichen simplex chronicus
- E. Dyshidrotic eczema



# Answer Analysis

- A. Fixed drug eruption – presents with new medication disappears 10-14 days after medication is removed and then reappears at next administration in exactly the same spot, well-demarcated violaceous to erythematous lesion
- B. Psoriasis – symmetrical, extensor surfaces, erythematous plaque with silver scale
- C. Lichen planus – violaceous/purple, polygonal, papules with pruritus and Wickham striae
- D. Lichen simplex chronicus – CORRECT ANSWER – well-demarcated area of thickened skin secondary to scratching/trauma**
- E. Dyshidrotic eczema – variant of atopic dermatitis that presents as vesicles on the hands/feet that are extremely pruritic and resemble tapioca pearls at the dermal subcutaneous junction

# Distinguishing this Dermatitis: **Lichen Simplex Chronicus**

- Repetitive rubbing and scratching of the skin results in visible tissue damage
- Often secondary to atopic dermatitis, driving force is repeated scratching
- Can also present as part of skin picking disorder or OCD
- Presents as well-defined plaques that are lichenified or thickened, sometimes scaly, pink, dusky red or violaceous
- Hyperpigmentation is often present in darker skinned patients
- Number one goal of treatment is to stop the scratching
- Topical corticosteroids under occlusion will help with this

# Patient with Medication and a Rash

- **A 19-year-old male presents with this acute eruption mainly affecting the torso.**
- **He is currently taking Amoxicillin for streptococcal pharyngitis diagnosed 7 days ago.**
- **The lesions are slightly itchy with an adherent scale.**

# What is the most likely diagnosis?

- A. Infectious mononucleosis
- B. Guttate psoriasis
- C. Pityriasis rosea
- D. Erythema multiforme
- E. Urticaria

# Answer Analysis

- A. Infectious mononucleosis – may present with an erythematous macular papular rash after administration of amoxicillin, not discrete lesions with scale
- B. Guttate psoriasis – CORRECT ANSWER – acute presentation of numerous drop-like psoriatic plaques typically following infection, may be first presentation of chronic psoriasis or an isolated manifestation**
- C. Pityriasis rosea – herald patch with collarette scale followed by smaller lesions in long axis lines of trunk, generally asymptomatic young adult
- D. Erythema multiforme – post viral infection or medication, development of target lesions on palms and soles and mucous membrane ulceration
- E. Urticaria – rapid development of pruritic hives and wheals post exposure

**The presence of the which of the following on physical exam would help to confirm your suspected diagnosis?**

- A. Auspitz sign
- B. Dermatographism
- C. Non-blanching on diascopy
- D. Yellow fluorescence on Wood's lamp
- E. Nikolsky sign

# Answer Analysis

**A. Auspitz sign – CORRECT ANSWER**

B. Dermatographism – present in urticaria

C. Non-blanching on diascopy – petechial or purpurial lesions

D. Yellow fluorescence on Wood's lamp – pityriasis versicolor, yeast overgrowth

E. Nikolsky sign – exfoliative blistering condition like TEN, SSSS, pemphigus vulgaris

# Distinguishing this Dermatitis: Psoriasis

- Chronic immune-mediated skin disorder resulting in well-demarcated erythematous plaques with a silver scale
- General age of onset is 30's or >50 years, genetic predisposition, other risk factors include smoking, obesity, medications (beta-blockers, lithium, antimalarials), infections
- Guttate is an uncommon but distinctive presentation in young adults triggered by URI or streptococcal pharyngitis involving papules and plaques less than 1 cm distributed on the trunk and proximal extremities
- Chronic plaque psoriasis involves symmetrical plaques on elbows, knees, scalp and back ranging in size from 1-10 cm, nail findings are also common with pitting and separation
- Associated disorders – psoriatic arthritis, ocular findings, increased incidence of CV disease



# Pediatric Patient with Pruritic Papular Rash on Extensors

- A 24-month-old male with 2-day history of pruritic rash that can be described as symmetric, monomorphous, flat-topped, pink-brown papules from 2 mm to 1 cm in diameter occurring on his cheeks, extensor surfaces of arms and legs, and buttocks.
- He has had mild nasal congestion, low-grade fever, and a couple of loose stools over the past week which were attributed to a viral infection.
- He is up to date on his immunizations and has no ongoing medical problems.

# What is the most likely diagnosis?

- A. Exanthum subitum
- B. Erythema infectiosum
- C. Henoch-Schonlein purpura
- D. Gianotti-Crosti syndrome
- E. Hand-foot-mouth disease

# Answer Analysis

- A. Exanthum subitum – high fever for 3 days, effervescence and then rash
- B. Erythema infectiosum – slapped cheek appearance not papular and truncal rash reticulated
- C. Henoch-Schonlein purpura – palpable purpura lower extremities and buttocks, abdominal pain, renal involvement
- D. Gianotti-Crosti syndrome – CORRECT ANSWER**
- E. Hand-foot-mouth disease – painful vesicles on lips oral mucosa, hands, feet

**Which of the following viral infections has historically been most associated with GCS?**

- A. HBV
- B. Parvovirus B19
- C. HIV
- D. HHV-6

# Answer Analysis

- A. **HBV – CORRECT ANSWER – of historical significance, and no longer the most common cause in immunized patients in US, EBV more common in US**
- B. Parvovirus B19 – Erythema infectiosum
- C. HIV – rash present in initial stages more morbilliform and often confused with mono-like illness
- D. HHV-6 - Roseola

## Distinguishing this Dermatitis: **GCS/Papular Acrodermatitis**

- Sudden, symmetric papular or papulovesicular eruption with acral distribution
- Acral = cheeks, buttocks, and extensor surfaces of forearms and legs
- Primarily affects children < 5 years and usually occurs in the setting of a viral illness (HBV, EBV are most common)
- Rash lasts for weeks to months and spontaneously remits without intervention
- If HBV is a concern – liver function tests and HBsAg and HBcAb

**A 44-year-old female presents for evaluation of a rash with itching and occasional burning sensation located under both breasts that has been present for the past several months. How would this rash be best documented in the medical record?**

- A. Weeping erythematous vesicular rash grouped under the breasts
- B. Well-demarcated beefy erythematous intertriginous rash with satellite lesions
- C. Dusky pink plaque with excoriations in the folds
- D. Salmon-colored plaques and papules with a fine collarette scale

# Answer Analysis

- A. Weeping erythematous vesicular rash grouped under the breasts
- B. Well-demarcated beefy erythematous intertriginous rash with satellite lesions – CORRECT ANSWER**
- C. Dusky pink plaque with excoriations in the folds
- D. Salmon-colored plaques and papules with a fine collarette scale



## Distinguishing this Dermatitis: **Candidal Intertrigo**

- Friction, moisture, and an improperly functioning immune system (DM, steroid or antibiotic use, HIV) contribute to the growth of Candida
- Erythematous, macerated plaques with fine peripheral scaling and satellite papules and pustules
- Affected areas are pruritic and painful if enough skin breakdown has occurred
- Typical areas affected: inguinal folds, axilla, scrotum, inframammary folds, abdominal folds, neck folds, diaper area
- After treatment with an azole antifungal or nystatin, keeping the areas dry is key

# General Treatment Guidelines: Driving Out Dermatitis

- Reduce inflammation
- Improve skin hydration/skin barrier
- Preventing/treating secondary infection
- Decrease pruritus thereby decrease scratching

# General Treatment Guidelines: Topical Corticosteroids

- Classes I (super potent) – VII (least potent)
  - Commonly used medium potency agents (III-IV) –  
Triamcinolone acetonide 0.025%, 0.1%, 0.5%,  
Mometasone furoate 0.1%, Hydrocortisone valerate  
0.2%
- Vehicle can affect absorption
  - Ointment is the most occlusive and the most powerful

# General Treatment Guidelines: Topical Corticosteroids

- FTU - Topical medication from standard tube the length of distal phalanx of index finger
  - 1 FTU = covers hand
  - 2 FTU = covers foot
  - 3 FTU = covers arm
  - 6 FTU = covers leg
  - 1 FTU = 0.5 grams of steroid cream or ointment
- Conservative rule of thumb – can be used for as many weeks as its class without side effects (i.e. Class 2 for 2 weeks, class 6 for 6 weeks)
- Side effects - striae, bruising, telangiectasia, skin fragility, pigment changes, suppression of HPA axis

# Dermatitis Differential Take Home Points

- Dermatitis is a non-specific term that refers to both acute and chronic erythematous, maculopapular, scaly, and pruritic rashes due to inflammatory, infectious, infestations and other less common etiologies.
- Recognizing the distribution and the associated symptoms and clinical findings for atopic, seborrheic, contact, and stasis dermatitis will allow the provider to narrow the diagnosis.
- Dermatitis masqueraders that must be ruled out include fungal and yeast infections, viral exanthemas, hypersensitivity reactions, and skin signs of rheumatologic conditions and malignancies.
- A provider can improve his/her dermatologic diagnostic skills by taking an organized approach to the evaluation of rashes that includes examination of morphology, distribution, and associated systemic signs/symptoms.

Thank you for watching and playing along!  
Hoping your 2021 is a happy one with many  
dermatologic diagnosis.

Now you know...What it is!

Have a great virtual conference.