The Usual Suspects:
Rosacea, Acne, Lichen Planus, Psoriasis, Contact Dermatitis

CYNTHIA GRIFFITH MPAS, PA-C
Rosacea

- Erythematelangectatic
- Papulopustular
- Phymatous
Rosacea

- Rosacea is a chronic inflammatory condition of the face, which may present with easy *flushing*, erythema, *telangiectasias*, papules and pustules, and/or *phymatous* changes
- Can have Ocular involvement: Blepharitis, FB sensation, burning, stinging, dryness, blurred vision, styes, corneal ulceration (refer to Ophthalmology)
- No comedones, unrelated to hormones. Triggers: sun, heat, emotion chemical irritation, alcohol, strong drinks, spices
Rosacea

- Topical treatments: Metronidazole topical gel or cream, Sodium Sulfacetamide with %5 sulfur, Azelaic acid
- Oral treatments: Tetracyclines, macrolides
- Lasers: Pulse dye laser (Vbeam laser), Intense pulse light laser
- All patients with rosacea should use sunscreen
- Steroids can worsen or induce rosacea
Acne Vulgaris
Acne Vulgaris

Primary lesion: Comedone
open and closed comedones, papules, pustules, nodules, and cysts

- Include the following when describing
  - morphology
    - Comedonal vs Inflammatory (either papular/pustular or nodulocystic or mixed)
  - severity (Mild, Moderate, Severe)
  - presence of scarring

- Pathogenesis of acne vulgaris is related to the presence of androgens, excess sebum production, the activity of *P. acnes*, and follicular hyperkeratinization
Acne Vulgaris Treatment

- **Topical antimicrobial**
  - Clindamycin, Erthromycin

- **Systemic and topical retinoids** – Vitamin A derivative, Tretinoin, Adapalene, Tazarotine (topical), Isotretinoin (Accutane, oral)

- **Systemic antimicrobials** – Tetracycline class: Minocycline, Doxycycline, Can also use Erythromycin

- **Systemic hormonal therapies** - Spironolactone, OCPs

- **Other topical adjuncts** - Benzoyl Peroxide, Azaleic Acid
Acne

Acne Excoriée des Jeunes Filles

Neonatal Cephalic Pustulosis- 2 wks-3months

Infantile acne- presents 3-6 months resolved 1-2 years

Drug Induced- within 2 weeks of oral or topical steriod use, INH, phenytoin, cyclosporine, lithium, Keflex, OCPs, Androgens

Acne conglobata- Men, late puberty-early adulthood, severe acne: papules, nodules, draining sinus tracts on chest, shoulders, back, nape, buttock. No system symptoms

Acne Fulminans- Acute Febrile Ulcerative Acne, Conglobata with systemic symptoms (fever, leukocytosis, myalgias, arthralgias, osteolytic lesions)
Molluscum Contagiosum

single or, more often, multiple, rounded, dome-shaped, umbilicated, pink papules that are 2-5 mm

- Viral infection due to a pox virus, transmitted by skin to skin contact
- Three main groups at risk (children, sexually active adults and immunosuppressed patients)
- Various treatment options available
  - Cryotherapy, Cantharidin, Curettage, Topical retinoids, Imiquimod
- In children spontaneous remission frequently occurs and no treatment is a reasonable option
Verruca (Warts)

Types: Common (Vulgaris), Plantar (Plantaris), Flat (Plana), Genital

<table>
<thead>
<tr>
<th>Type</th>
<th>HPV virus</th>
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<tbody>
<tr>
<td>Common</td>
<td>HPV-1, 2, 4</td>
</tr>
<tr>
<td>Plantar</td>
<td>HPV-1, 2, 4</td>
</tr>
<tr>
<td>Flat</td>
<td>HPV-3, 10</td>
</tr>
<tr>
<td>Genital</td>
<td>HPV-16 and 18</td>
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</tbody>
</table>

- Treatments: Watchful waiting, Cryotherapy, Salicylic Acid, 5-fluorouracil cream, Imiquimod, Electrocautery and curettage, diphencyprone (DCP) Immunotherapy

Also viral etiology similar to Molluscum (worse with Immunosuppression)
Verruca (Warts)

Common Warts *Verruca Vulgaris*: hyperkeratotic, exophytic, dome shaped, *verrucous appearing* papule on the fingers, dorsal hands, elbows, knees, with *punctate black dots*

Flat warts *Verruca Plana*: skin colored or pink flat topped papules common on the dorsal hands, face and arms
Lichen Planus

Acute and sometimes chronic inflammatory dermatosis of the skin and/or nails and mucous membranes

5 P's: Planar (flat topped), Pruritic, Polygonal, Purple (violaceous) Papules

Associated with Hepatitis C infection

Typically on the flexor wrists, low back, penis/vagina, nails, lower legs
Lichen Planus – Wickham Striae

Wickham striae - Lacy white reticulated pattern, visible on mucosal surfaces on within lesion lesions
Lichen Planus
Lichen Planus Treatment:

Topical steroids
Oral Steroids
Cyclosporine
System Retinoids
PUVA
Psoriasis
Psoriasis

Clinical description: Sharply demarcated thick papules and plaques with \textit{silvery scale}

Pathogenesis: large number of activated T cells, which appear to be capable of inducing keratinocyte proliferation this hyperproliferative state results in thick skin and excess scale

Auspitz sign – pinpoint fine bleeding upon removal of scale

Woronoff’s ring – concentric blanching of the erythematous skin at or near periphery of healing psoriasis plaque
Things that can Trigger/Aggravate Psoriasis

Skin injury (Keobner phenomenon)
Streptococcal infections
HIV
Hypocalcemia can trigger generalized pustular psoriasis
Stress
Lithium, B-blockers, antimalarials, interferon, ACE-Inhibitors, gemfibrozil, NSAIDS, imiquimod, Rituximab, rapid taper of corticosteroids
ETOH, Smoking, obesity
Nail changes in Psoriasis

-Pits (most common finding) punctuate depressions of the nail plate surface
-Oil spots (most specific finding) yellow brown discoloration
-Trachyonychia: rough nails as if scraped with sandpaper longitudinally
-Onycholysis: separation of the nail plate from the nail bed
-Subungual hyperkeratosis: abnormal keratinization of the distal nail bed

Nail Changes classically associated with Psoriatic Arthritis
Psoriatic Arthritis

A seronegative spondyloarthropathies (Rheumatoid Factor negative)

Characterized by Enthesitis – inflammation involving periarticular structures i.e. tendons ligaments at their insertion points.

Most common pattern of arthritis is asymmetric oligoarthritis (mainly hands and feet)

Will cause inflammation of the DIP joints (different from RA, similar to OA or Reactive Arthritis)

Inflammation of the DIP and PIP joints = Dactylitis (sausage digit)

Pencil in cup changes on radiograph (late disease)

Arthritis mutilans – also seen in RA, shortening of the phalynx
Psoriasis

Total Body Surface Area (TBSA) - measured by estimating the area of the patient's body that is affected by psoriasis using the unit 1% = 1 of the patient's palm

Treatment:

Less than %5 BSA

Topical high potency steroids +/- calcipotriene (a vitamin D analog)
Psoriasis

Total Body Surface Area (TBSA) - measured by estimating the area of the patient's body that is affected by psoriasis using the unit 1%=1 of the patient's palm

Treatment: Greater than 5% BSA

Systemic therapy - Phototherapy NBUVB, bbUVB, PUVA,

Oral medications: Methotrexate (Folate analog, immunosuppresant), Acitretin (Oral Retinoic, Vitamin A derivative), Cyclosporine (immunosuppressant), Apremilast (inhibits phosphodiesterase 4)

Biologic Agents TNF-α inhibitors: infliximab, etanercept, adalimumab, IL 12/23 blocker: ustekinumab
Contact Dermatitis

Types of dermatitis or eczematous conditions:

seborrheic, atopic, dyshydrotic, nummular, contact...

Two types of Contact Dermatitis: Irritant and Allergic
<table>
<thead>
<tr>
<th>Irritant</th>
<th>Allergic</th>
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<tbody>
<tr>
<td>Type of dermatitis may be induced in any person if a sufficiently high</td>
<td>Delayed hypersensitivity reaction</td>
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<tr>
<td>concentration is used.</td>
<td>Requires initial exposure</td>
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<tr>
<td>No previous exposure is necessary</td>
<td>The sensitization process requires 10-14 days</td>
</tr>
<tr>
<td>Effect is evident within minutes, or a few hours at most.</td>
<td>• Upon re-exposure, dermatitis appears within 12-48 hrs</td>
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<tr>
<td>Pain, burning</td>
<td>Itching</td>
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<tr>
<td>Classically more common than Allergic Contact dermatitis</td>
<td></td>
</tr>
<tr>
<td>ICD remains at the site of contact and resolves in a few days after</td>
<td>Can last 1-3 weeks with ACD</td>
</tr>
<tr>
<td>exposure</td>
<td></td>
</tr>
<tr>
<td>Examples soaps, detergents, bleaches, capsaicin (pepper spray), acid,</td>
<td>Common: nickel, fragrance, gold, rhus (poison ivy)</td>
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Contact Dermatitis

Rhus (poison ivy) allergic contact dermatitis – treat with oral prednisone for 2-3 weeks duration

Topical Steroids

Avoidance of the allergen – Patch testing

Patch testing

- Day 1 application - leave patches on 48 hours
- Day 3 remove patches initial reading,
- Day 5 final reading

Avoidance of allergen + resolution of rash = clinically relevant allergen
Allergen of the Year

2019 - Dimethyl fumarate: Inhibits mold, used to treat psoriasis, “Poison chairs”

2010 – Neomycin: (antibiotic)

2009 – Mixed dialkyl thioureas: (Neoprene rubber is a common source.)

2008 – Nickel

2007 – Fragrance

2006 – p-Phenylenediamine

2005 – Corticosteroids

2004 – Cocamidopropyl betaine: yellow vicious liquid used in shampoos

2003 – Bacitracin

2002 – Thimerosal: antiseptic, antifungal used as a preservative in vaccines, ophthalmic and nasal products, tattoo ink

2001 – Gold

2000 – Disperse Blue
Allergen of the Year

2020 – Isobornyl Acrylate
2019 – Parabens (Non) Allergen
2018 – Propylene Glycol
2017 – Alkyl Glucoside
2016 – Cobalt
2015 – Formaldehyde
2014 – Benzophenone
2013 – Methylisothiazolinone
2012 – Acrylate
2011 – Dimethyl fumarate is the chemical associated with 'poisoned chairs' and 'toxic sandals'.
2010 – Neomycin
2009 – Mixed dialkyl Thiourea – Neoprene rubber is a common source.
2008 – Nickel