21 - Erythema Multiforme

Vascular Rxn Pattern Differential:

1) Erythema Multiforme
2) Toxic Erythema Group
   A) Viral Exanthems
   B) Drug Eruptions (SJS, TEN, DIHS, others)
   C) Toxin-Mediated Eruptions (SSSS, TSS, KD, Scarlet Fever)
3) Gyrate/Figurate Erythema
   A) Erythema Annulare Centrifigum (EAC)
   B) Erythema Gyratum Repens (EGR)
   C) Erythema migrans (Lyme disease)
   D) Erythema marginatum (rheumatic fever)
4) Urticaria
5) Vasculitis
6) Vasculopathy
7) Retiform Purpura
8) Vascular Growths

EM Clinical Presentation:

- Typically affects **young adults**
- **Abrupt-onset, erythematous macules → papules & targetoid lesions** affecting **extremities** & **face**
- Classic **targetoid lesions** have **3 zones**
  1) Dusky Center that may have vesiculation or necrosis
  2) Middle pale ring surrounded by
  3) Outer erythematous ring

PEARL: Targetoid lesions that are papular or elevated are considered *typical targets*, whereas those that are nonpalpable or macular are considered *atypical targets*

Divided into EM Minor & EM Major:

- Both have **typical papular target lesions on extremities and face**, and neither progress to SJS or TEN

EM Minor

- **NO systemic symptoms** (e.g. Fever, arthralgias)
- **Minimal mucosal involvement**

EM Major

- **Systemic symptoms**
- More **severe mucosal involvement** (e.g. Erosions of buccal mucosa and lips)

PEARL: Other mucosal surfaces that can be affected include: eyes, ears, nose, mouth, vagina, urethra, and anus

PEARL: Erythema multiforme is now considered a separate entity from SJS & TEN! Not considered to be on spectrum.

Three Main Differences between EM & SJS

1) EM = papular targetoid lesions vs SJS = +/- macular targetoid lesions
2) EM favors hands, extremities, and face vs SJS/TEN which relatively spares distal extremities
3) EM has specific associations…

PEARL: Associations w/ Erythema Multiforme

- **90%** are **associated** w/ **infections** (SJS 90% caused by medications)
  - Most common: **HSV** and **mycoplasma pneumonia**
  - Others: EBV, CMV, HIV, Salmonella, Tuberculosis, histoplasmosis, dermatophytes
- Uncommonly due to medications such as NSAIDs, anticonvulsants, or antibiotics

PEARL: Hx of acute, subacute or discoid lupus + EM = Rowell's Syndrome

Diagnosis:

- **Hx + Physical Exam**
- Biopsy if diagnosis unclear

Histology:

- **Spongiosis**
- **Vacuolar interface**
- Scattered **epidermal necrotic keratinocytes**, "dead reds"
- **Superficial infiltrate** w/ **lymphocytes** & **histocytes**

Treatment:

- **Symptomatic Tx** (Self-limiting after 2 weeks)
  - **Pruritis**: **Anti-histamines** (e.g. diphenhydramine or loratadine) + **mild topical steroid**
  - **Painful oral lesions**: "**Magic Mouthwash**" (combination of Benadryl, viscous lidocaine, and Maalox w/ or w/o corticosteroids or nystatin)
  - **If 2/2 recurrent HSV**: HSV prophylaxis w/ **acyclovir 400mg daily** or **valacyclovir 500mg** or **1g daily** up to 6 months or as long as needed