

14- Stasis Dermatitis/Red Leg Differential

Stasis Dermatitis

Background:

- Seen on lower legs of pt w/ chronic venous insufficiency
- **Pathogenesis: Venous insufficiency** → venous HTN and extravasation of fluid and RBCs out of vessels into interstitium → edema, hemosiderin deposition, and inflammation in the skin
- Differential: **Lipodermatosclerosis, Contact Dermatitis, Cellulitis, DVT, Necrotizing Fasciitis**

Clinical Presentation:

- **Subacute eczema** w/ **erythematous** slight **scaly patches** and **plaques** on the **lower legs**, especially the *medial* side of the lower leg
- Associated **pitting edema**
- **Typically bilateral** (can be unilateral if pt has had trauma, prior cellulitis, or surgery e.g. vein harvest for CABG)
- Also can have **acute** or **chronic presentations**:
 - o **Acute: bright red, warm, tender patches** or **plaques** that may have **vesicles** or **serous weeping fluid**

PEARL: Ask the patient if they were standing for an extended period of time! (Standing for long periods → acute flare of stasis derm)

- o **Chronic:** more **scale** and **hyperpigmentation** due to hemosiderin deposition

PEARL: Name other complications that can occur in stasis dermatitis?

- 1) Contact sensitization (**allergic contact dermatitis**): Higher rate → due to pts using **triple abx ointment** on rash since they think it is infected, impaired skin barrier, ↑ presence of inflammatory cells
- 2) Auto-sensitization (**id rxn**): **immune mediated eczematous** or **papulovesicular** lesions that occur at **distant sites** from primary rash
- 3) **Secondary infections**: altered skin barrier + poor circulation = predisposition for super-infection from *Staph* or *Strep*

Physical Exam:

- **Unilateral vs bilateral**:
 - o Unilateral suggests cellulitis but stasis dermatitis can also be unilateral
- **Look for an entry for skin infections**:
 - o Tinea pedis or skin maceration between toes
- **Look for scale** on rash itself (takes time to develop!)
 - o Argues against cellulitis, suggests stasis dermatitis
- **Palpate the affected skin**
 - o Exquisite pain or crepitus, think necrotizing fasciitis
 - o Unilateral pitting edema + Homans, think DVT
- **Elevate the leg for 30 seconds**

- o Erythema improves, think stasis dermatitis
- **If thinking cellulitis, outline erythema on legs**
 - o Helps to monitor for improvement w/ antibiotic regimen

PEARL: Swollen Leg? What do you ask your patient?

- Is the rash **painful**? Suggests **cellulitis**
- **Itchy**? Suggests **Stasis** or **Contact Dermatitis**
- **Extended time on your feet** (Trip to Disney)? **Stasis Dermatitis**
- Significant time **immobilized** (Plane or Post Surgery)? **DVT**
- **One sided**? **Cellulitis**
- **Bilateral**? **Stasis Dermatitis**
- **Risk factors** for **infection** (**Diabetes, immunosuppressants, recently hospitalized**)? **Cellulitis**
- **Topicals** on the rash (Antibiotic ointment)? **Allergic Contact Dermatitis**

Diagnosis = CLINICAL!

- Biopsy: **May not be helpful**; pt already has poor circulation and likely will not heal well

Histology:

- **Spongiosis** correlating w/ dermatitis seen clinically, **increase proliferation** of **capillaries below DEJ** (reactive to the relative anoxia), **extravasated RBCs** w/ **hemosiderin deposits**, and possibly **dermal fibrosis** at later stages

Treatment:

- **Compression & Elevation**
 - o Compression stockings (>20 mmHg)
 - o Severe: Serial Unna Boots or prednisone
 - o Elevate above level of heart as much as possible
- **Topical corticosteroids** + Mupirocin for dermatitis
- Patient education
 - o No cure, only control with above measures; may have another case of stasis dermatitis in future
 - o Empower pt to use compression + elevation

Cellulitis

Clinical Presentation:

- Look for the 4 Cardinal Signs of Inflammation: **Red, Hot, Swollen, Tender**
- Systemic Changes: **Fever & Fatigue**
- **+/- Mild ↑ WBC** count
- Moderate to Severe: +/- Vesicles vs bullae, bruising, petechiae

Asteatotic Eczema

Background:

- Extreme form of xerosis affecting pt > 60 y/o
- Also known as Eczema Craquele

Clinical Presentation:

- Diffuse **xerosis** w/ **fine scaling** that **progresses** to **inflammation** and **cracking** of the **skin** (resembling cracked porcelain)
- Pt experiences pruritis and can be painful when cracking of skin is deep enough to cause **fissures**
- Weeping, crusting, bleeding on occasion

PEARL: What can exacerbate xerosis to cause eczema craquele?

- **Low Humidity**
- **Harsh soaps**
- **Prolonged or frequent hot showers**
- **Heating w/ wood stoves**
- Hypothyroidism, renal failure, liver DZ, malnutrition, HIV, Sjogren's

Diagnosis:

- Clinical diagnosis typically sufficient w/out biopsy
- If no improvement w/ treatment, consider Labs for Thyroid (TSH), Liver & Renal DZ (CMP), HIV, Zinc levels, ANA w/ reflex

Treatment:

- **Avoid Triggers**
- Apply **moisturizer**
 - o Vanicream, Cetaphil, Cerave, Vaseline **w/in 3 minutes** after shower **while skin is damp** to hold moisture
- Topical corticosteroids + antihistamines for itching