An Approach to Skin Diseases in the ER

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Concentrate on Descriptors

Vasculitis-leaky blood vessels
Targetoid lesions-round lesions with blue or red center
Urticaria-hives
Redness
Blisters-clear fluid that may become murky
Pustules-murky small fluid filled lesions
Infestations

For each descriptor, think about following etiologies

• Infection
• Drug Reactions
• Connective tissue disease
  – Rheumatologic/Blistering Diseases
• Leukemia/Lymphoma
Vasculitis

- Leaky blood vessels
- Multiple purple papules/macules
- Usually legs, arms
- +/- fever, +/- edema

Infection, drugs, connective tissue dz, leukemia/lymphoma

Vasculitis: Infection

- Meningococcemia
- Strep
- Staph (endocarditis)
- Hepatitis A, B, C
- TB

- Nuchal rigidity/Neuro changes
- Murmur
- CBC, Pharyngeal cx, ASO titer, Bl cx X 3, Hep screen, Chest X-Ray
- skin biopsy helpful to confirm
Vasculitis: Drugs

- Any antibiotics
- Any medications

Vasculitis: Connective Tissue Disease

- Lupus/Dermatomyositis
- Rheumatoid Arthritis
- Cryoglobulinemia
- Henoch-Schonlein (± GI and renal)
Vasculitis: Connective Tissue Disease
- Joint aches, photosensitivity
- ANA, ESR, Fe
- Rheumatoid factor, Hep C and cryoglobulins

Vasculitis: Leukemia/Lymphoma
- CBC/smear
- Chest X-Ray

Vasculitis
- Nutritional:
  - Scurvy-lack of vit C
  - Older person-eating toast and tea
  - Psychiatric pt
  - Look for bruising, GI bleeds, corkscrew hair
  - Get Vit C level and replace vit c
  - Biopsy helpful
Treatment of Vasculitis

- Look for and treat underlying disease
- Check Urinalysis for red cells
- If asymptomatic - reassure
- If symptomatic (pain, swelling, joint aches, red cells in urine): bedrest, antihistamines, colchicine (0.6 mg bid), Prednisone
Targetoid Lesions
(Erythema Multiforme)

- Round lesions with dusky blue centers
- Usually painful
- Often on palms, soles, knees, elbows
- +/- blisters

Infection, drug, connective tissue dz, leukemia/lymph

Targetoid Lesions: Infection
(Reaction pattern to infection)

- Herpes Simplex
  - Previous history
  - Recent outbreak of orolabial/genital HSV
  - Cx if there is a primary lesion
- Mycoplasma: dry cough
  - Persons under 21
  - +/- blisters
  - Titers, chest x-ray, start IV, erythro
Targetoid Lesions: Drugs

- Septra most common

Targetoid Lesions: Treatment

- Discontinue offending drug
- Prednisone controversial
  - Helpful in HSV driven EM
- Persons with recurrent EM
  - Prophylax with ACV 400 mg tid
Urticaria

- Wheals that come and go within 24 hr periods
- Pruritic

Infection, drugs, connective tissue dz, leukemia/lymphoma

Urticaria: Infection

- Strep-sinusitis, teeth, pharynx (cx’s and ASO titer)
- Viral
Urticaria: Drugs

- Any
- Aspirin
- Others:
  - Food products
    - Nuts, shellfish, citrus fruit

Urticaria: Leukemia/Lymphoma

- CBC
- Chest X-Ray

Blisters

- Clear fluid underneath

Infection, drugs, connective tissue dz, leukemia/lymphoma

Acute Urticaria from any cause can last 6 weeks
- Chronic urticaria: 2-7 years
- If you can find cause, treat it
- Avoid Prednisone if possible
- Non-sedating antihistamines by day
  - Allegra, Claritin, Zyrtec
- Sedating antihistamines by night
  - Benadryl, Atarax, Doxepin
Blisters: Infection

- Sometimes fluid is murky (= pustulobullous lesion)
- Herpes Zoster - Shingles
  – Dermatomal, painful
  – Patients may have pain before blister appears
Blisters: Treatment

- ACV 800 mg 5 x’s/day
- Famvir 500mg tid
- Valacyclovir 1000 tid
- begin within 48 hrs of onset of blister. Any time in immunosuppressed host
- Pain control
  - NSAIDS/Tylenol
  - Neurontin: 100 mg tid
  - Elavil: 25 mg qhs or q 8 hrs
- Prednisone: no role

Staph: Bullous Impetigo

- (+) bacteria in blisters
- Tx: antibiotics
Staph scalded skin

- Toxin mediated reaction to staph (from skin, heart, ears, etc.)
- Big blisters
- Painful red skin underneath
- NO BACTERIA IN BLISTERS
- Search for source
- Tx source with antibiotics
- Comfort care for skin (burn unit)

Blisters: Drug

- Bullous Drug Reaction
  - Septra, antiseizure medications
  - History and biopsy diagnosis
Blisters: Drug

Toxic Epidermal Necrolysis
- Sheets of skin desquamating
- Biopsy (frozen section) helpful to distinguish between staph scalded skin and drug
  - Prednisone controversial
  - IVIg being used
Pressure Necrosis

- Blister with strange borders
- Usually in person found down for long period of time
- Check CK and creatinine
- Area will slough off
Blisters: Connective Tissue Diseases

- Blistering Diseases:
  - Bullous Pemphigus and Pemphigoid
    - Mid-size to large blisters
    - Often in the elderly
    - Biopsy diagnosis and consultation
    - Can be life threatening
    - Start Prednisone
Blisters: Connective Tissue Diseases

- Blisters in or around umbilicus in pregnancy
  - Bx to rule out herpes gestationis
  - Monitor fetus
  - May need Prednisone

Total Body Redness

*Infection, drugs, leukemia, lymphoma*

- Infection
  - Toxin medicated staph/strep
  - EBV
  - CMV

Total Body Redness: Drug

- Drug Hypersensitivity Syndrome
  - Allopurinol
  - Dapsone
  - Antiseizure medications
  - Septra
  - Nevirapine/Sustiva/Abacavir
  - (+) fever
  - (+) lymphadenopathy
  - Check kidneys, check liver
  - +/- Prednisone
Total Body Redness: Leukemia/Lymphoma

- T-cell lymphoma of the skin
- Biopsy in order to rule out mimickers: atopic dermatitis, psoriasis, drug reaction
- CBC, chest x-ray

Pustules: Drugs

- Acute generalized Exanthematous Pustulosis
  - Small pustules in intertriginous areas
  - +/- fever
  - Increase WBC
  - Penicillin, cephalosporins, Erythromycin, antiseizure medications
  - Biopsy diagnosis to rule out pustular psoriasis
  - Treat with Prednisone
Pustular Psoriasis

- Usually in persons with a history of psoriasis
- Can see in pregnancy
- High output state
- Patients need to be cooled down in the hospital
- Topical steroids +/- methotrexate or Acitretin
- Do not treat with Prednisone

Infestations

- Scabies
  - Papules/pustules
    - Web spaces
    - Genitalia
    - Scapula
    - Periumbilical
    - Breasts
- Scabies prep. to make diagnosis
Infestations

- Treatment
  Permethrin 5% (Elimite)
  2 applications 1 week apart
- Clothing instructions
- Concomitant treatment of intimates (even if not itching)
  itch continues x3 weeks, give patient TAC and antihistamine for comfort

Infestations

- Body Lice
  - Live in clothing
  - Feces make the patient itch
  - Excoriations upper back and seam lines
  - Get rid of clothes
  - Do not need to treat patient with Kwell or Elimite