

NEUTROPHILIC DERMATOSES

Neutrophilic Dermatoses: What are they?

- Poorly defined, varies widely on the text you read, however..
- *A spectrum of diseases based on histopathologic finding of neutrophilic infiltrate without evidence of infectious agent, historically without vasculitis*
- May be classified as epidermal(superficial) and dermal (neutrophilic dermatoses en plaques, deep) with and without vasculitis



What is our differential?

Infectious...

- Pyoderma, cellulitis
- Septic Vasculitis
- Deep Fungal Infection
- Mycobacterial Infection
- Leshmaniasis

Differential Diagnosis- Noninfectious

- Sweet's Syndrome: Acute Febrile Neutrophilic Dermatositis
- PG
- Neutrophilic Eccrine Hidradenitis
- Rheumatoid Neutrophilic Dermatositis
- Erythema MultiForme
- Urticarial Vasculitis
- Bechet's
- Bowel Associated Dermatositis-Arthritis Syndrome
- Erythematous Elevation Diutinum
- Panniculitis
- Halogenoderma
- Collagen Vascular Disease
- Granulomatous Disease

Sweets Syndrome the prototype of ND



Source: Wolff K, Goldsmith LA, Katz SI, Gilchrest BA, Paller AS, Leffell DJ:
Fitzpatrick's Dermatology in General Medicine, 7th Edition: <http://www.accessmedicine.com>
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Show me some skin

- Lesions are nonpruritic erythematous plaques
- May be pseudovesicular, pseudopustular due to edema
- May be necrotic
- Bullae, vesicle, pustules, nodules can occur
- Central yellow area giving target appearance
- Vesiculobullous more prominent with hematologic malignancies
- Head/Neck>Body except in malignancies



What are the five types of Sweets:

- Classic, Idiopathic
- Associated with Malignancy
- Associated with Inflammatory or autoimmune disorders
- Drug Associated
- Pregnancy Associated



Is there a race/sex/country/ age predilection?

- No Race Predilection
- Female to Male ratio 4:1 except with cancer equal
- More common in Japan
- Average age 30-60 years

Name associated infection/ malignancy/drug

- URI- streptococcus, GI- yersiniosis, atypical mycobacteria, CMV, HIV, Hepatitis, BCG vaccine
- **AML**, solid tumor-gu, breast, colon
- **GCSF**, furosemide, hydralazine, minocycline, bactrim, all-trans retinoic acid

Criteria for Diagnosis of Sweet's Syndrome

Major

- Abrupt onset of Cutaneous Lesions
- Histopath c/w sweet's

Minor

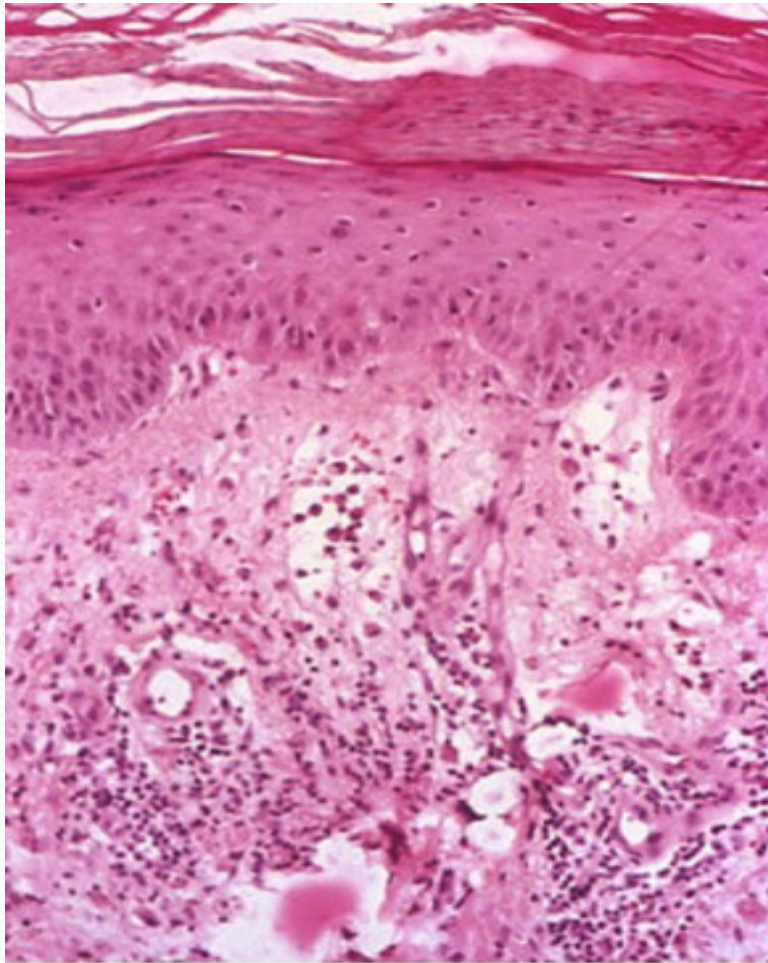
- Preceded by or associated with infection, vaccinations, malignancies, inflammatory disorders, pregnancy
- Fever or constitutional symptoms
- Leukocytosis
- Response to Steroids



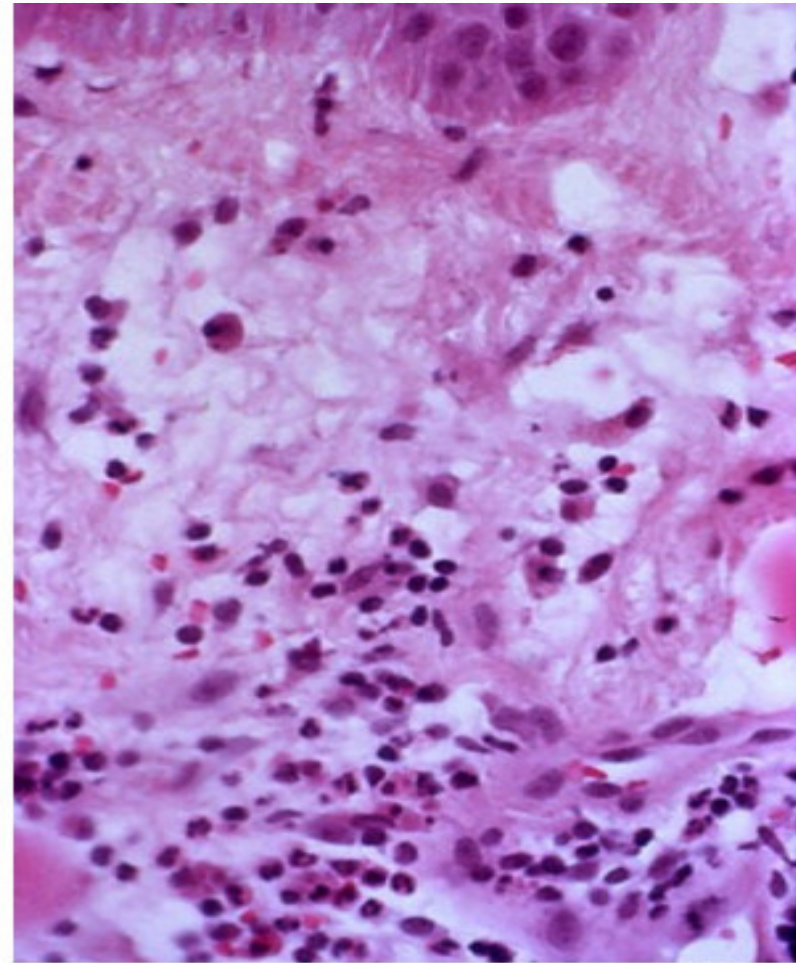
What are the treatment options?

- Steroids 0.5-1mg/kg/day for 4-6weeks
- Intralesional Steroids for isolated lesions
- Potassium Iodide- 900mg.day
- Dapsone- 100-200mg/day
- Colchicine 1.5 mg/day

Pathology



a



b



Pathology

- Diffuse nodular and perivascular neutrophilic infiltrate without evidence of vasculitis
- Leukocytoclasia without fibrinoid necrosis
- Dermal edema may create subepidermal or intraepidermal vesiculation
- Epidermis spared on new lesions