Dermatology Pearls for the Internist

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I have no relevant disclosures
I will talk about off-label medication use

I will not discuss much pathophysiology
Goal= practical tips, new info
The ED calls:

“68 y/o M with cellulitis, admitting for IV antibiotic therapy”

Not an emergency, but especially common
• Cellulitis admissions per year in US: 537,000
• The total cost for all cellulitis discharges (2013): $3.74 billion (95% CI, $3.65 billion–$3.83 billion)
• Many mimics of cellulitis

Peterson et al. Open Forum of Infectious Disease 2017
Pseudocellulitis

Contact dermatitis
Psoriasis
Atopic dermatitis
Gout
Tinea
Lymphedema
Venous stasis
Peripheral artery disease
Pseudocellulitis

Approximately 30% of patients admitted with a diagnosis of cellulitis received an alternative diagnosis prior to discharge or within 30 days

Raff et al. J of Am Acad Derm, 2017
Is there a better way to diagnose cellulitis?

- 840 adults admitted via ED with LE cellulitis
- Excluded if:
  - Not leg
  - Penetrating trauma/ surgery/ ulcer
  - Osteomyelitis
  - IV antibiotics

Raff et al. J of Am Acad Derm, 2017
ALK-70 Score

4 variables

>4 pts: ≥82.2% likelihood of true cellulitis

<3 pts: ≥83.3% likelihood of pseudocellulitis

Raff et al. J of Am Acad Derm, 2017
SPEED ROUND:
5 MINUTE DERM CONSULTS
INPATIENT PEARLS
If you think it’s a drug rash . . .

Morbilliform

DDx will be viral exanthem vs. medication reaction

A skin biopsy may not be helpful

Most drug rashes are benign and go away with removal of the drug

Onset 1-2 weeks after the med and several days on re-exposure
Danger Zone: Drug Hypersensitivity Syndrome  
(formerly DRESS)

2-8 weeks after med started, usually 1st exposure
Morbilliform rash - many morphologies
Facial and ear swelling
May have mucosal lesions
   Not in standard morbilliform drug eruptions
Ill-appearing

Treat J Cancer Therapy Advisor
DHS Meds:
carbamazepine, phenobarbital, phenytoin, lamotrigine
allopurinol
olanzapine
sulfamethoxazole, sulfasalazine
minocycline
dapsone
abacavir
Can they go home with a drug rash?

Assessing patients with drug rash:

Feeling well – Drug hypersensitivity syndrome patients appear ill
Fevers or nodes – Seen in DHS
Mucosal lesions - In SJS/TEN mucosal lesions usually precede rash
Skin pain - seen in SJS/TEN
Blisters
So is this a dangerous rash?
Erythema Multiforme - a benign mimic

- Hypersensitivity rxn
- **NOT** on SJS/TEN spectrum
- >90% caused by infection
  - HSV1 most common
  - Mycoplasma
- 3 part morphology:
  - Dusky center
  - Pale ring
  - Red ring
- Erupt over 72hrs starting on dorsal hands, feet
Mucosal Involvement

20% with oral lesions after rash

Bullae $\rightarrow$ erosions

Supportive cares

No admission needed unless for pain control/ IVF
Have you heard of this?

- yo with h/o cough, fever
- Treated with TMP/SMX
- Day 4: skin lesions and oral erosions
- Admitted w/ concern for SJS
CXR with patchy infiltrates
Mycoplasma IgM+
Diagnosis?

Photo: courtesy of Dr. Sheilagh Maguiness and Kristen Hook
Mycoplasma pneumoniae-induced rash and mucositis (MIRM)

Features that help to distinguish MIRM from erythema multiforme or SJS/TEN include:

– Children, teens, younger adults
– ++ mucosal involvement
– Sparse cutaneous involvement
– **Warning:** Same concerns as SJS/TEN in relation to blindness, strictures
MIRM

• If clinical suspicion:
  – Antibiotic coverage
  – Mycoplasma titers
  – Eye exam
OUTPATIENT PEARLS
34 y/o F with this rash for 3 days. How do you treat?

Prednisone

Instead try targeting the histamines:

Schedule a non-sedating 2nd generation H1 blocker (↑ doses)

H2 blocker

Leukotriene receptor blocker

Zuberier et al. Allergy 2009
Hand dermatitis 101:

Atopic dermatitis vs contactant

What are the hands touching?

- Soaps
- Wipes
- Cleaning supplies
- OTC products

Use a stronger steroid - thick skin

Moisturizers
It’s just psoriasis, right?

Obesity is a risk factor for psoriasis
Psoriasis as an independent cardiovascular risk factor:
  - HTN
  - HLD
  - DM2
  - NASH
  - Metabolic syndrome
  - CKD
Other comorbidities:
  - Depression
  - Inflammatory bowel disease
  - Lymphoma

Takeshita et al JAAD 2017
• Risks are proportional to severity of skin disease
• Does treatment alter these risks?
Bruises on my legs:

- Pigmented purpuric dermatoses:
- Ascorbic acid 500 mg BID
- Rutoside (bioflavinoid) 50 mg BID

Arms?

- Actinic purpura - different etiology
- Topical arnica oil, retinol, ceramides, niacinomide, vit K

Is it a fungus and what should I do?

• Many causes of nail dystrophy
• Clinical clues
Treatments

Oral terbinafine  66% clinical cure, 76% mycologic cure
Oral itraconazole 70% clinical cure, 63% mycologic cure
Ciclopirox clinical cure rate 6%-9% clinical cure
Efinaconazole (48 wks) 18% complete cure, 55% mycologic cure
Tavaborole (48 wks) 9% cc, 40% mc
Laser (12% cc)

Saunders et al. J Pharm Practice 2017
83 y/o F with itch

Iron metabolism- ferritin, CBC
Uremia- BMP
Hepatic disease- LFTs, hep B, C serologies
Infection- HIV, parasites
Malignancy- Cancer screens, CXR, CT
Meds: Opioids, ACEI, statins
Heme dyscrasias- SPEP/UPEP
Endocrinopathy- TSH, A1C, Vit D,
Neurological diseases- Nerve conduction studies,
CHF
Psychological factors
Pruritus of elderly

Millington et al. BJD 2018
What do I do?

• Gentle skin cares
• Moisturize
• Non-sedating antihistamines
• Other options?
• Thank you!
• Questions?
References

- Drug Hypersensitivity syndrome James Treat, Cancer Therapy Advisor