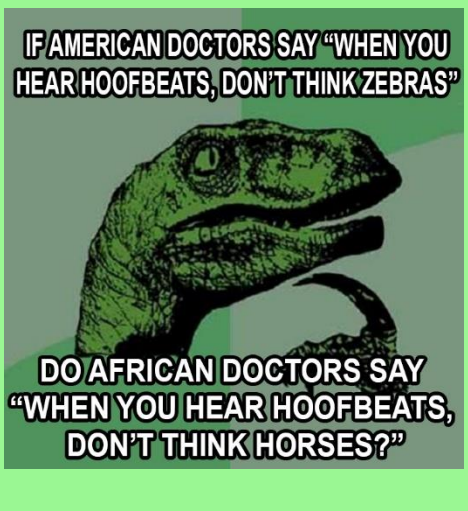
Peds Pearls: Horses and Zebras – Dermatology Disasters

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Serious or Not Serious?

Simple fact, most of us don't know enough about rashes. When you consider that as many as 15-20% of primary care and emergency department visits involve a dermatologic concern, the need to be comfortable with skin issues is a reality. But, what is it about dermatology that gives it such power to strike fear (streams of sweat and great personal angst) into well-meaning, highly educated professionals across the country? It is mostly the language of dermatology that provides the foundation for this terror: What exactly is a macule vs. a papule and a papule vs. purpura? Most importantly, there is the "What the heck am I looking at and is it going to kill the patient or not?" factor! And so… here is a peds dermatology nurse practitioner's attempt to drive away those fears and some clues to help you separate the "not so bad" from the "uh-oh's."

"Horses"

Clues your rash might NOT be serious:

1) **Infections of the Skin and Subcutaneous Tissue**
   - When in doubt, send bacterial and viral cultures.
   - When rashes worsen, they are infected until proven otherwise!
2) **Dermatitis**
   - Skin rashes are ever so common.
   - In the absence of fever, blisters, palpable purpura, and/or systemic symptoms, in an otherwise healthy patient, try topical steroids first.
   - Please avoid oral steroids unless there is airway involvement!
3) **Hives (a.k.a. Urticaria)**
   - Unless there is an obvious cause, there usually needs to be an outpatient work-up for allergens.
   - Causes can be idiopathic - Try some oral antihistamines and topical steroids.

"Zebras"

Clues your rash might be more serious:

1) **Fever AND Rash**
   a. Staphylococcal Scalded Skin Syndrome (bacterial)
      - Nasty staph infection that hurts really bad.
   b. Necrotizing Fasciitis (bacterial)
      - "Necro" means dead and "fasciitis" means inflammation of the fascia (under the skin).
   c. Meningococcemia (bacterial)
      - Big blue blotches that don't blanch are bad.
   d. Rocky Mountain Spotted Fever (bacterial)
      - Tick bite, flat, red/purple rash, fever, headache, then possible total body failure, "bulls-eye rash."
   e. Eczema Herpeticum (viral)
      - History of eczema/atopic dermatitis AND exposure to HSV_1 or HSV_2, presenting with multiple blisters, severe itching, and/or pain.
   f. Varicella Infection (viral)
      - "Chicken Pox" with primary exposure and "shingles" with reactivation.
2) **Fever AND Blisters/Swelling**
   a. Stevens-Johnson Syndrome/Toxic Epidermal Necrolysis (TEN)
      - Drug-induced sloughing of skin (sulfonamides, anticonvulsants, NSAIDs)
   b. Angioedema
      - Idiopathic or allergic reaction (antibiotics, NSAIDS, ACE inihibitors) induces airway edema from Hell.
3) **Rash in an IMMUNE-COMPROMISED individual (any rash!)**
   - Just bad.
4) **Palpable Purpura**
   - Just bad (see meningococcemia above).
5) **Erythroderma**
   - Full body redness is never a good thing.
   - Even worse with itching, fever, and shock.

Horse or Zebra

In the 1940's, Dr. Theodore Woodward told his students, "When you hear hoof beats, think horses, not zebras." His advice was based upon what is traditionally understood as Occam's razor, which suggests that the simplest or most common answer is the most likely one. In medicine, one should consider more common things as common. When it comes to derm disasters in the ED, most rashes are "horses," but if you see any of the second set of clues, the rash might actually be a "zebra!"



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