

## Dermatology: Case by Case Differential Diagnosis “I have bug bites”

- 45 y/o female presents to clinic due to persistent itching and feeling like insects are crawling and biting her
- This is the 3<sup>rd</sup> office visit for the same problem
- Previously treated for scabies with permethrin (elimite) and Benadryl symptoms persist
- Pt got frustrated and tried using Clorox on skin and also sprayed Raid on skin
  
- Pt brought in small piece of hardwood floor in a vial that she gauged from her home and points out that the bugs that are biting her are in the wood
- Pt has a PMH of schizophrenia she stop taking Haldol a few weeks ago because it made her feel drowsy
- Exam: multiple excoriated lesions on arms neck and legs with generalized erythema of the skin
- Dx of delusions of parasitosis made
- Treated by resuming Haldol and referred back to psychiatrist
- Reassurance that all parasites are gone
- Given taper dose oral corticosteroids and antipruritics

### Delusions of Parasitosis

- Patient insist that they have bug bites
- Become angry at practitioners because they don't believe patient
- More common in women over the age of 50 with psychiatric hx
- Focal erosions and excoriations noted on exam
- Also seen in amphetamine and cocaine addicts

### I itch all over

- A 65 y/o diabetic patient presents with extensive itching for the past month
- Seen by a clinician a few weeks ago advised that she had dry skin and told to change bath soap, given rx for Hydroxyzine
- Symptoms persist
- Symptoms worse at night

### Scabies

- Scabies: caused by Mite *Sarcoptes scabiei*
- nocturnal itching
- Contagious to people residing at same house
- Common in hospitals and nursing homes
- Distribution in web spaces in fingers, under breast, axilla, waist line and genitals
- Lesions: linear excoriations burrows can also be seen

## Scabies

- Doesn't always present classically consider Dx in any patient with extensive itching
- Treatment permethrin (elimite)
- Apply for 8 hours wash off
- Clean all bedding and clothes in hot water and dry in hot cycle
- Treat all household members
- Treat itching with antipruritics
- If itching severe use tapering dose of steroids

## Scabies Burrows Scabies Distribution

I have lumps in back of my scalp

- A 35 y/o female c/o painful lumps in back of scalp worse for past week
- On further questioning pt admits to itchy scalp
- Exam: enlarged occipital nodes
- Generalized erythema of scalp with excoriations
- Multiple nits on hair shaft with multiple moving lice noted

## Pediculosis Capitis

- Causative organism: *Pediculus humanus capitis*.
- Head lice
- Transmitted by combs, brushes, hats, bed linen, close contact
- More common in children
- Lice can survive up to 3 days outside the host, eggs can survive 3 week outside host
- Treatment permethrin or pyethrin cream rinse
- Leave on for 10 min retreat in one week

“I have jock itch”

- A 25 y/o male c/o extensive itching in groin for two weeks treated with otc miconazole without relief
- Symptoms started a few days after getting drunk at a bar and having a one night stand with a women he pick up
- Exam no signs of tinea cruris
- Excoriations noted in groin and suprapubic region with small white nits noted on pubic hair

Pediculosis pubis

- Causative organism: *Phthirus pubis*
- Crab louse can also infect hair in chest and eyelashes
- More common in young males
- Considered and STD
- Transmitted by close contact and sharing underclothes
- PE: excoriations with nits on hair shaft
- enlarged inguinal nodes
- Rx: Treatment permethrin or pyethrin cream rinse
- Re-treat in one week

Common causes of pruritis

Atopic dermatitis

Lichen Simplex Chronicus

Nummular eczema

Dyshidrotic Eczema

Urticaria

Pruritic urticarial papules and plaques of pregnancy (PUPPP)

Herpes gestationis

**CAUSES OF PRURITUS WITHOUT RASH**

<b>METABOLIC AND ENDOCRINE CONDITIONS</b>	<b>MALIGNANT NEOPLASMS</b>	<b>Hematologic disorders</b>	<b>Hepatic diseases</b>
Hyperthyroidism Hypothyroidism Diabetes mellitus Chronic renal failure	Lymphoma Leukemia Multiple Myeloma	Polycythemia vera Iron deficient anemia	Obstructive biliary disease
<b>Miscellaneous disorders</b>			
Dry skin Senile pruritis			

“I have sores in my mouth”

- 45 y/o male c/o sores in mouth and also on penis for one week
- Pt denies prior symptoms
- Pt has hx of DM, HTN, had CABG 6mo ago
- Pt taking metformin, atenolol, lipitor
- Denies fever, chills, URI symptoms
- Difficult to eat or drink due to sores
- PE: ulcerative lesions on buccal mucosa and posterior pharynx, ulcerative lesions on glans penis
- Labs ordered: viral culture of penis, oral mucosa, RPR, CBC, CMP, all labs normal except glucose elevated.
- Pt referred to dermatology for bx
- My tentative Dx of Behcet's Syndrome
- Dermatologist recommended ENT referral stated case was not dermatology related

I have sores in my mouth

- Pt referred to another dermatologist for second opinion, pt developed bulla on trunk and arms prior to the visit with dermatology
- Bx + for Pemphigus vulgaris
- Rx with oral prednisone and methotrexate for 6 months
- Pt has been in remission for 6yrs

Pemphigus vulgaris

- Autoimmune skin disorder that causes flaccid bulla in mouth and throughout the body
- The bulla are located just below the epidermis causing the bulla to rupture easily
- Fatalities occur in about 10% of patients from secondary infection or from complication from immunosuppressive therapy

Bullous Pemphigoid

- Occurs in patients 60 -70 years of age and lesions bulla that are not as flaccid as pemphigus, also autoimmune the bulla are located deeper at the basement membrane
- Fatalities are rare
- Treatment is with systemic steroids and immunosuppressants

“My eyes and my mouth itch”

- A 19y/o female presents to family practice clinic for f/u after urgent care visit 2 days ago
- Pt seen due to itching, burning sensation in eyes and mouth
- Pt given antihistamine orally and eye drops
- PMH: + acne, otherwise in good health
- Meds: Bactrim for acne prescribed by dermatology 3 weeks prior
- Exam: moderate injection of conjunctiva with erythema of oral mucosa, mild erythema of lips

- No skin lesions noted
- Given Rx antibiotic eye drops advise to continue bactrim and antihistamine
- Return to clinic if no better
- Pt worsened and went to ED next day
- Pt developed oral ulcers lip erosions and blurred vision
- During hospital stay pt developed generalized body rash with desquamation

- Pt lost significant vision and required corneal transplantation
- Offending agent Bactrim
- Dx Steven-Johnson syndrome

Steven-Johnson Syndrome

- Usually drug induced skin reactions
- Involves mucous membranes and skin
- Potentially fatal with multisystemic involvement
- Most common offending drugs are:
  - Sulfonamides, allopurinol, hydantoins, carbamazepine, phenylbutazone, chlormezanone, amithiozone, aminopenicillins
- Steven-Johnson Syndrome and Toxic Epidermal Necrolysis
- Cephalosporins, fluoroquinolones, vancomycin, rifampin and NSIDS
- also been associated with viral infections and mycoplasma pneumonia
- toxic epidermal necrolysis is thought to be part of the spectrum of Steven Johnson Syndrome
- The amount of epidermal detachment differentiates the conditions
  - Steven-Johnson Syndrome and Toxic Epidermal Necrolysis
- <10 % epidermal detachment = SJS
- >30 % epidermal detachment = TEN
- Treatment: D/C offending drug
- Supportive therapy usually in burn ward
- Fluid replacement

- Infection prevention
- steroids

#### Life Threatening Skin Disorders

- Pemphigus vulgaris
- Toxic epidermal necrolysis (TEN)
- Stevens-Johnson syndrome
- Toxic Shock Syndrome
- Staphylococcal scalded skin syndrome