Typical Cases: Dx?

Rosacea

1. Name ONE common snack food that worsens rosacea?
2. Which one should a rosacea patient drink….iced coffee or hot coffee?
3. Does spicy food worsen rosacea?

Case History

13 year-old boy
Mother brings him in for hair loss
? Itchy
Only historical thing of note: new kitten in household
What is diagnosis?
What would you like to do now?

Case History

Wood’s lamp negative
Plucked hairs: Culture positive M. canis
Saline moistened sterile swab: Culture positive for M. canis
NOW WHAT?
Case History

- 35 year-old man
- 10 year history of “rash” on elbows and knees
- OTC moisturizers only
- Smokes (2ppd)
- Otherwise healthy
- DX?
- What else do you need to check?

Case History

- 78 year-old Veteran
- ASx but oozing scalp nodule of 4 months
- Growing
- PMH benign except for appendicitis as child
- ROS: Negative
- SH: 120+ pack-year smoker

Itchy 82 Year-old Patient: Polypharmacy

Diagnosis?
- Most important interventions?
- ANY LAB TESTS?

Ceramide Products

- Cerave: Cream, Lotion, Wash
- Curel: “Rough Skin Rescue Lotion”
- Curel: “Advanced Ceramide Therapy” (Fragrance Free)
- Eucerin: “Professional Repair”
- Cetaphil: “Restoradem”
- Aveeno: “Eczema Care”
Case History

What TWO things does he need?

Skin biopsy = Metastatic Bronchogenic Carcinoma

Cutaneous Metastasis

- Most occur close to anatomic location of primary tumor... BUT may be distant
- Most common site: chest wall, back and scalp... BUT can be anywhere
- Firm-hard, round to oval, painless, hairless papulonodule of variable size... BUT may be diffuse thickening or alopecia
- Skin colored to red to blue-black
- Solitary or multiple


Cutaneous Metastasis: Nodule

Bronchogenic carcinoma

General Skin Exam

- 24 year-old female
- “I don’t feel well.”
- Pressed for specifics
- “Tired”
- “Gums bleed”
- “SOB with exercise”
- “Lost weight”

Metastatic What?

- 24 year-old female
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- 24 year-old female
- “I don’t feel well.”
- Pressed for specifics
- “Tired”
- “Gums bleed”
- “SOB with exercise”
- “Lost weight”
What do you see? What does it suggest?

General Skin Exam

- Hct 30%
- Hgb 10g/dL
- WBC 19,450
- 27% myeloblasts
- Platelets 20,200

What's diagnosis?

Leukemia Facts ‘n Figures

- 50,000 new cases/year in USA
- M>F, though ratio varies widely
- Leukemia by age group:
  - ALL: Children, usually <10
  - AML: Teen to young adult or older
  - CML: 40-50
  - CLL: 70

ASx, Small Firm Papule on the Nose

Angiofibroma

- Small (1-5 mm) firm reddish-brown to flesh-colored papules
- Nose and medial cheeks (on nose often called “fibrous papule”)
- Solitary and Multiple (latter syndromal)
- DDx: Solitary ones resemble BCC or benign nevi
Multiple Angiofibromas

Angiofibroma

- Adolescence to Adulthood (Solitary)
- Childhood to Adolescence (Multiple)
  - Tuberous sclerosis
  - MEN-1
  - Birt-Dubbe-Hogg
- Nose and central face

Case

Case

Case History

- 79 year-old female
- Minimally pruritic rash on chest and back
- Long-standing allergic rhinitis: takes daily Claritin
- Otherwise good health and no meds
- What to worry about?

Erythema Gyratum Repens

- Concentric erythema, trailing edge scales
- Mild pruritus
- "Wood Grain" morphology
- Trunk primary site
- Rash usually precedes cancer diagnosis (80%)
- Variable sites/types of malignancy, but lung is the most common
- Rare but reliable sign of cancer
- 85-100% association

JAAD 54:745, 2006
BMJ Case Rep. 2016; Mar 7; pii: bcr2016214665

Hair Loss
- 25 year old
- Previously with full scalp hair and in good health; Nausea
- Reports to ED with multiple complaints Admitted
- Subj: Pain fingers/toes, Poor vision, Headache, Hair loss
- Obj: Tachycardia (HR 125), Hypertension (180/110), Optic neuropathy
- Abn nerve conduction studies
- Normal brain MRI, Spinal tap

What is suggested by this Sx Set? What questions might you ask him?

Heavy Metal Poisoning
- Arsenic
  - Diarrhea, vomiting
  - Hematuria
  - Muscle cramps
  - Alopecia
  - Lethal 1-2 mg/kg
- Lead
  - Anorexia, Constipation
  - Headaches, Irritability,
  - Delirium, Memory Loss
  - Seizure, Coma
  - Tingling hands & feet
  - Lethal 450mg/kg/mg
- Mercury
  - Peripheral neuropathy
  - Tachycardia, Hypertension
  - Memory impairment, Insomnia
  - Mood changes, Tremors
  - Lethal 20-65mg/kg
- Thallium
  - Peripheral neuropathy
  - Tachycardia, Hypertension
  - Lethal 9-20 mg/kg/mg
- Book Her!
  - Elevated thallium in 24 hour urine collection, blood, hair
  - When confronted, wife admits to buying thallium-containing rodenticide from China
  - Odoless, colorless, tasteless
  - She’s been adding to his morning coffee every morning!
  - Charged: Attempted murder

CASE STUDY
- 40 year-old woman
- Presents for chief complaint of facial lesions which hurt
- Pain worse in winter
- Incidental: spotting between periods
- WHAT ARE HER FACIAL LESIONS?
- WHAT IS HER RISK?

Leiomyoma-Renal Cell CA Syndrome
- Uterine (75-98%) and cutaneous (36-85%) leiomyomata (painful)
- Leiomyoma by age 25-30
- Early risk of aggressive papillary renal cell CA
- Autosomal dominant
- Fumarate hydratase gene (1q42.2-42.3)
38 year old
Homeless veteran
Presents with complaint of severe itching on ankles
Recent comprehensive lab work all WNL
No systemic complaints
While removing clothing for a full examination, the primary care physician saw this.

What is the diagnosis?
How would you manage this?

A 67 year-old Viet Nam War veteran complains of itching in the groin... "since the war"
His medications include daily metoprolol to suppress a supraventricular tachyarrhythmia and BID metformin due to modest hyperglycemia
His current HbA1c is 6.5
His pulse and BP are normal for his age
Recent comprehensive metabolic panel is WNL
WHAT TWO DIAGNOSES COME TO MIND?

What is the likely diagnosis?
What might be done to verify this diagnosis?
**DIAGNOSIS?**

Venous Lake: Dermatoscope

**General Skin Exam: Case Hx**
- 82 year-old female
- Resides at home
- Breast cancer (20 yrs ago)
- Medications, all chronic, for hypertension and cholesterol control
- Sudden onset of generalized itching

**Another 80 yo, For comparison**

Why is SHE itching?
What would you do?

**Case: Pancreatic tumor**
**Biliary obstruction**

**Case History**
- 53 year-old welder
- Presents with third episode of painful lesion on the hand
- Admitted for presumed cellulitis last two times
- IV antibiotics plus incision/drainage
- Febrile (102.2°F)
- WBC 13,900
- ESR 40
What would you do next?

**Neutrophilic Dermatosis of the Dorsal Hand**

*Bx = Sheets of mature PMNs in dermis*

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**“Atypical” Pyoderma Gangrenosum**

**Bullous Sweet’s Syndrome**

- Acute onset of bulla (often hemorrhagic) with rapid necrosis; 20% w/ cancer
- Bx: sheets of pmns + edema
- Upper Extremities, Face
- Fever associated
- Leukemia (AML)
- Myelodysplasia
- Monoclonal gammopathy

Source:
- Orphanet J Rare Dis 2:34, 2007

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**Hair Loss**

- 65 year old female
- Previously with full scalp hair and in good health
- Mother dies 4.5 months ago from metastatic breast cancer
- Sister dies one month later in an auto accident
- Patient on exam table, crying, with bag of hair in her lap

---

**Hair Loss**

- Patient on exam table, crying, with bag of hair in her lap
- What are the first two things to do?
- 230 hairs in bag
- All telogen
- Name 2 blood tests to order in this case

---

**Hair Loss**

- Normal:
  - Serum iron, Ferritin, TIBC
  - TSH
  - Negative:
  - RPR
  - WHAT IS THE DIAGNOSIS?
Telogen Effluvium

- Usually a precipitating event
- Physical illness
- Post-partum
- Surgery
- Psychic trauma
- Lasts 3-6 months, stabilizes 3 months, then re-grows over 6 months
- Rx = “Tincture of time”

General Skin Exam

- 58 year-old F
- During annual exam note rash in both axillae
- ASx
- Obese, otherwise exam normal
- Labs normal, incl FBS, A1c TG, Cholesterol

Acanthosis Nigricans

- ASx Velvety pigmentation
- Neck or axillae typical
- Neoplastic (~20%): Rapid onset
- Adenocarcinoma (90%)
  GI & GU; Commonly gastric
- 60% concurrent, 20% before and 20% after cancer dx
- Also seen in obesity and insulin-resistant diabetes and in purely hereditary form

What is this called? What might you do next?
**ITCHING**

- 28 year-old male
- Itching for just 4 months
- Weight loss: 20 lb
- “Feels bad”
- Presents for very sore throat and skin rash depicted

**His throat**

**What Is This? Dangerous?**

**Hair Loss**

- 22 year old
- Previously with full scalp hair and in good health
- Senior second string tight end on Ohio State University’s football team
- Asymptomatic scalp hair loss
- All other hair is OK
- WHAT ONE TEST IS MOST IMPORTANT?

**Hair Loss**

- WHAT ONE TEST IS MOST IMPORTANT?
- RPR + 1:256
- DIAGNOSIS?
- STAGE?
- TREATMENT OF CHOICE?

**What is this ASx, firm deep-seated, solitary scalp nodule, most likely? Treatment?**
History
- 31 year-old female
- Bitten multiple times by her domesticated cat (1 hr ago)
- Cat up to date w/ vaccinations (rabies)
- Bled modestly and now bruised
- Minimal pain

More Bites!

Cat Bite
- Most (2/3) due to an animal well known to victim
- Long, sharp fangs with deep, penetrating injury
- Implant oral flora, in particular Pasteurella multocida, into tendons, ligaments, joints
- Rapid tissue destruction
- 2/3 involve hands/arms
- Risk: meningitis, endocarditis, sepsis

What Would You Do?
- Cleanse wound, then primary closure
- Admission with IV antibiotics per ID
- Ice wraps, but nothing else
- Oral Augmentin
- Surgical consult for tissue debridement

Admit, IV Antibiotics, Hand Surg Consult
- 12hr Delay
- 48hr Delay
Itching

- 75 year old female
- Resides in self-care unit of a nursing home facility
- Previously in good health
- No medications except MiraLAX
- Complains of increasing and generalized itching for three months

Name four likely diagnoses considering the patient’s age and residential status

- Neurologic
- Internal cancer
- Xerosis
- Scabies

Patient is neurologically intact per neuro consult
- All routine blood work NL
- Recent mammogram, GYN exam, chest x-ray, and colonoscopy are normal

WHAT STILL NEEDS TO BE DONE?

Prep from wrist....

Treatments (2) choice?
Case History

- 40 year old male
- ASx facial rash of recent onset
- Otherwise healthy
- DDx? Likely Dx?

Case History

- 40 year old male
- ASx facial rash of recent onset
- Otherwise healthy
- DDx??????
- CBC, Biochem panel, UA, RPR: Normal or negative

Case History

- 40 year old male
- ASx facial rash of recent onset
- Otherwise healthy
- DDx??????
- Bx: plasma cells
- NOW WHAT?

Case History

<table>
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<th>PCR</th>
<th>In-situ hybridization</th>
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<td>Dermatophytes</td>
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Annular Syphilid: Peri-oroficial

- 55 year-old male
- Vacation panhandle of Florida
- Returns home; 5 days later, develops itching/burning lesion
- Foot lesion persists and expands over next week
Case History

- 55 year-old male
- Vacation panhandle of Florida
- Returns home; 5 days later, develops itching/burning lesion
- Foot lesion persists and expands over next week
- Diagnosis????

Larva Migrans

Ancylostoma brasiilense*  | Dog and cat*
Ancylostoma caninum | Dog
Ancylostoma ceylonicum | Dog and cat
Uncinaria stenocephala | Dog (Europe)
Bunostomum phlebotomum | Cow
Gnathostoma spinigerum | Pig

Larva Migrans: Rx

- Cryosurgery (Difficult...where is worm?)
- Topical thiabendazole 10% QID
- Oral albendazole (Albenza®)
  200mg BID x 7d - or - Single dose 400mg
  Poor absorption: Give w/ fatty meal
  Elevated LFTs (16%) Headache (10%)
  78/78 cured with one week Rx regimen
- Oral thiabendazole 25mg/kg BID x 3d
- Ivermectin 200μg/kg, single dose

What benign skin tumor was just removed?

What is the cause of this hair loss?

Which Person Has Better Prognosis?

JAK Inhibition (Oral)
Itching

- 6 year-old Korean male
- Only child
- Resides at home
- Student
- Recent acute onset of...
- Intractable itching on face only (Scalp OK)
- Good health, No meds

WHAT DOES HE HAVE?
ASK ONE QUESTION....

New Kitten

- NOW WHAT?

During Routine PE You See This!
What to do and why?

- New Kitten
- NOW WHAT?

During Routine PE You See This!
What to do and why?

- New Kitten
- NOW WHAT?

Why Did This Woman Lose Hair?

- UGLY DUCK
- Why Did This Woman Lose Hair?
Why Did This Woman Lose Hair?

- Patient in nursing home
- Takes multiple drugs for RA
- Very itchy, 24/7
- Fissures painful
- DIAGNOSIS?

ITCHING PATIENT

Crusted Scabies

- Ivermectin 200ug/kg Days 1,2,8,9 and 15
- Topical 5% Permethrin daily x two weeks
- Risk: Sepsis

Crusted Scabies

- 28 year old black F
- Indolent hair loss
- Burning/Stinging
- Joint aches hands
- Labs: proteinuria, anemia

Cause of Hair Loss?

Case History

- 81 year-old
- T2DM, Hypertension, Renal insufficiency, Coronary bypass x 2
- Hx of 28 BCC, 5 SCC
- Scalp had multiple BCC
- EDC, Mohs, Excision
- Excision w/ grafting
- Whole scalp radiation
- Lost to F/U x 5 years
- Then presents as you see.....

Problems

- No medical clearance for surgery
- He doesn’t want more surgery of any kind
- He already had radiation to whole area
- His uncontrolled T2DM, advancing renal disease (Cr = 2.35), and coronary artery disease makes life expectancy limited
- His main complaint: CONSTANTLY oozing and bleeding scalp precludes going outdoors or engaging in social activity
- His desire: “Can you make it so I can at least enjoy the few years I have left?”

Problems: Solution

- Vismodegib 150mg/day offered
- Adverse effects discussed at length
- Tolerates medication fairly well
- AE: muscle cramps (controlled by exercises before bedtime and upon arising, hydration), nausea without vomiting (controlled by smaller and frequent meals, hydration and standing dose ondansetron)
- Some areas clear, others re-epithelialize enough to improve quality of life; HE IS HAPPY!
Thanks For Your Attention!