Mimics from TEXAS

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*Conflict of interest - Elsevier
*I do not own stores that sell Rapini
Instructions: “Cover 2 cases”

- But Rapini has short attention span
- Does not follow directions
- Loves “USA today” newspaper – nothing in depth
- So I will cover more cases superficially
Dirk Elston said he would present two cases mimicking LMDF

• First I had to look up LMDF
• Then I pulled out two LMDF-like cases to show we have that same situation in Texas
Talk to your patients and take a history!

- Famous Sir William Osler MD: “LISTEN to the patient, take a history, as the patient is giving you the diagnosis”

- John Knox MD, former Baylor Derm Chair: “Don’t pay any attention to the history, as the patient is throwing you off the track”
I teach in the physical exam course in med school

- I tell them that we dermatologists often already know the DX when we walk in, so the art of medicine is to make it seem like we are listening when we are not
- Patients complain that docs don’t listen
- HMO demands 50 patients per day
History:
“Swimming in a lake”
Swimmer’s itch: rare to find the schistosomes on biopsy.

Cercarial dermatitis, clam digger’s itch (Long Island), sawah itch (Malaysia), koganbyo (Japan), sedge pool itch (Michigan)

- Caused by cercariae of more than 20 species of non-human schistosomes that usually infects birds, rodents, and other small animals.
- *Trichobilharzia*, *Ornithobilharzia*, *Gigantobilharzia*, *Austrobilharzia*, and *Orientobilharzia*.
- Over 15 states in the US, more in north central states (Michigan, Illinois, Minnesota, Wisconsin, Nebraska, and the Dakotas). Avian migration routes
Cercarial dermatitis

• Adult schistosome grows and copulates in the portal vessels of the definitive host, lays eggs in intestinal wall which are eventually excreted in the feces into the water.
• Miracidium (a larval form) hatches from the egg which then infects a water snail, the intermediate host.
• Within the snail, the miracidium gives rise to thousands of fork-tailed cercariae, the infective free-swimming organism causing swimmer’s itch.
• Cercariae are shed from the snail in search of their definitive host, penetrate the epidermis (die within a few days if wrong host)
• Outbreaks infecting humans (dead-end or accidental hosts) are more frequent in the summer and seen especially in swimmer’s who have had contact with vegetation in shallow waters.
Non-human schistosome life cycle
• **Swimmer’s itch:**
  Freshwater, cercariae of schistosomes, papules on exposed skin

• **Seabather's eruption:**
  Salt water, cnidarian larvae such as Linuche unguiculata, papules under bathing suits
Case 2: LMDF?
Demodex brevis
Actually we didn’t do a biopsy
Demodex folliculitis, demodectic rosacea, demodicosis, Demodex blepharitis

• Often pustular, or papulopustular
• 10% of all facial skin biopsies exhibit mites
• Difficult to prove definitive role since Demodex is normally prevalent
• Rx: Topical sulfur, pyrethrum, oral or topical ivermectin
Demodex TRIVIA!

• Travel at night, copulate in upper portion of follicle
• Nymphs have 6 legs – adults 8
• Nymphs live 7 days, adult stage 6 days
• They cannot poop – no anus!
• Molecular studies: D. brevis (shorter, lives in sebaceous glands) and D. folliculorum may be polymorphism of same species
Case 3
Cell-poor subepidermal blister

HH85-6038
Cell poor subepidermal blisters

- Cell poor pemphigoid
- Porphyria cutanea tarda
- Pseudoporphyrina (drugs)
- Bullous amyloidosis
- Bullosis diabeticorum
- Ischemic bullae
- Scar with blister artifact
Immunofluorescence done in this case – “consistent with pemphigoid”

- Rx prednisone – no help
- Later: kidney biopsy = amyloid!
Case 3. Bullous amyloidosis

- Very few cases in the literature
- Amyloid may sequester immunoglobulin and give false positive immunofluorescence resembling pemphigoid
- Primary or localized cutaneous amyloid can blister
- Cutis 1989;43:346-352
HH85-6038 – Another case of bullous amyloid
Case 4

- 75-year-old black woman
- 5 years of “blepharitis” and itchy eyes
- Dx = keratoconjunctivitis
- Rx = topical antibiotics, steroids, lid scrubs
- Then “horizontal lid shortening procedure”
Sebaceous carcinoma H&E

• Squamoid, basaloid, adenoid, spindled
• Resembles BCC-SCC
• Pagetoid can be clue, but SCC can do that too
Sebaceous carcinoma special stains

- Oil-red-O if frozen section
- Adipophylin, nearly 100%, but look at staining pattern: membranous and cytoplasmic vacuoles
- CK7+ in 88%, but also 9% in SCC, and 28% BCC
- EMA – don’t over-read weak positive, common in SCC and other adnexal tumors
Sebaceous carcinoma special stains

- Factor XIIla (only the clone AC-1A1), Clark et al, JCP 2016;43:657
  100% of seb Ca, 8% of SCC have strong nuclear staining
- Very good study of other stains by Plaza et al, Am J DP 2015:37:809
Case 4. Sebaceous carcinoma
clinical

• Misdiagnosed as chalazion, blepharitis, conjunctivitis, ocular pemphigoid, BCC, SCC
• Average age 64 years
• Slightly more in females
• Lower lid 2x more than upper
• Both lids in 10%
• Often multifocal
Sebaceous glands of eyelids

- Meibomian: inner eyelid
- Zeis: eyelashes
- Sebaceous glands with vellus hairs
- Caruncle
Sebaceous carcinoma prognosis

- Local recurrence 33%
- Metastasis 33%
- Worse prognosis if both lids or pagetoid
- Better if < 6 mm or lower lid alone
Case 5. 74 yo F 10-24-96
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Case 5. Pleomorphic (symplastic) leiomyoma

- Rare, resembles leiomyosarcoma
- Hyperchromatic large nuclei
- NO mitoses, No necrosis, Not highly cellular, smaller lesions
- In this case, multiple lesions longstanding for years favors benign
Superficial leiomyosarcoma

- Males = 2-3x more than females
- Superficial ones may metastasize but almost never fatal – better than deep SQ leiomyosarcomas
- Mitoses are key (>5 per hpf)
- Necrosis, hemorrhage, larger size
- Rarely ulcerates
Pathologists, like dermatologists are class 1 with liability risk

- One reason: The favorite plant of the pathologist and radiologist is the hedge
- Multiple internal-external consults help
- “It takes more guts to call it benign rather than malignant”
Tendency to call more things malignant

- Sebaceous adenomas, prolif pilar cysts – all malignant now?
- If you call it benign, only bad things can happen to you and the patient
- Lawyers do not send positive feedback certificates in the mail when you are right
- After 10 years, you still cannot prove benign was right
With many lesions, must look at cytology, architecture, clinical

- Pleomorphic BCC (BCC with monster cells)
- Dermatofibroma with monster cells
- Pleomorphic lipoma
- Pleomorphic fibroma
- Pilomatrixicoma with mitoses
- Irritated seborrheic keratosis