Learning Objectives

• Review some interesting physical exam findings
• Learn some unusual external presentations of systemic disease
• Test your knowledge of the accuracy of exam findings
A is for Amyloidosis
Some causes of macroglossia

- Amyloidosis
- Hypothyroidism/cretinism
- Beckwith-Wiederman’s syndrome
gigantism, macroglossia and umbilical abnormalities
- Hamartomas
- Neoplasm
- Angioedema
- Tb/fungi/actinomycosis/syphilis
Amyloid types

- **Immunoglobulin light chain (AL) amyloidosis formerly primary amyloidosis**
  - most common type
  - affects heart, kidneys, skin, nerves and liver.
  - Mucocutaneous lesions in 30-40% of patients with primary systemic (AL) amyloidosis

- **AA amyloidosis- formerly secondary amyloid**
  - kidneys but occasionally GI tract, liver or heart.
  - occurs along with chronic infectious or inflammatory diseases, such as rheumatoid arthritis or inflammatory bowel disease.

- **Hereditary (familial) amyloidosis**
  - affects the liver, nerves, heart and kidneys.
  - African-Americans have a greater risk of this type than do Caucasians

- **Dialysis-related amyloidosis**
  - joints and tendons
B is for
B is for Bullous pemphigoid

- Most common autoimmune subepidermal blistering disease
- Blisters usually tense, intact
- Pemphigus vulgaris rarely intact blisters
- Rule out and prevent secondary infection
- Chronic with exacerbations and remissions
Greek *pemphix* meaning blister or bubble

- circulating IgG autoantibodies directed against the cell surface of keratinocytes; intraepidermal blisters

- Pemphigus three major forms:
  - pemphigus vulgaris,
  - pemphigus foliaceus
  - paraneoplastic pemphigus

Patients with paraneoplastic pemphigus have a known or occult associated neoplasm, usually of lymphoid tissue. Painful, severe oral and conjunctival erosions are a prominent feature of paraneoplastic pemphigus.
Paraneoplastic Pemphigus
B is also for Black Hairy tongue
Black Hairy Tongue

- Overproduction of pigment by bacteria, often altered flora
- Hyperplasia of filiform papillae, lack of fiber in diet, common in edentulous patients on soft diets
- Treat candida if present
- Gentle debridement, Hydrogen peroxide
C is for
C is for Candidiasis

- Intertriginous zones
- Superficial satellite pustules
- Can culture if needed
- Topical azole or polyene
- Remove predisposing factors, moisture, friction, occlusion
D is for (fever, lymphadenopathy, eosinophilia)
**D** is for **DRESS**

- **Drug Reaction with Eosinophilia and Systemic Symptoms.**
- Fever, lymphadenopathy, culminating hepatitis, myocarditis, nephritis, pneumonitis, CNS, thyroid.
- Anticonvulsants, sulfonamides, allopurinol, minocycline
- Treatment-remove agent, supportive, consider steroids
D is also for Dentures
E is for Examination
E is also for Endocarditis
F is for
F is for Folliculitis

- Perifollicular pustules, terminal hairs
- Culture may show normal flora, Staphylococcus is most common pathogen
- Topical benzoyl peroxide, topical antibiotic, rarely needed oral
- Reduce irritation, moisture, friction
G is for
G is for Gottron’s papules

- Dermatomyositis autoimmune disease, bimodal age distribution
- Photodistributed violaceous poikiloderma
- Look for proximal extensor myopathy
- Adult disease often paraneoplastic

**BONUS:** Name 3 other skin findings:
- Heliotrope
- Shawl sign
- Calcinosis Cutis
- Cuticular telangiectasia
His for Gingival Hyperplasia
Gingival Hyperplasia

• **Gingival overgrowth (GO)**, aka gingival hyperplasia secondary to drugs, was first reported in epileptic children on phenytoin. Also cyclosporin.

• **Risk factors:**
  – gingival inflammation (gingivitis due to poor oral hygiene)
  – depth of the periodontal pocket on probing
  – dental plaque may provide a reservoir for the drug
  – dose and duration of cyclosporine therapy.
I is for
I is for Intertrigo

- Skin folds, semi-occluded
- Local factors, friction, heat, moisture
- Bacterial and yeast overgrowth
- Treatment is removal of aggravating factors
- If really itchy, 1% hydrocortisone
- Topical azole or polyene
J is for Peutz Jeghers Syndrome
Peutz-Jeghers Syndrome

- Intestinal polyposis type II
- Periorificial lentiginosis
- Autosomal dominant disorder with a high penetrance
- Mucocutaneous pigmented macules
- Hamartomatous polyps of the gastrointestinal tract
K is for
Kaposi’s sarcoma

• Viral induced disease
• Neoplasia vs hyperplasia?
• Classic, African endemic, immunocompromised, HIV
• Multifocal disease (GI, lymph nodes, lung) that may require chemotherapy or radiation
AND..K is also for KISS
L is for
L is for Lyme disease (erythema chronicum migrans)

• Annular erythema at bite site,
• Ixodes tick infected with *Borrelia burgdorferi*
• 7-15 days after bite
• Untreated: 60% arthritis, 10% neurologic, 5% AV block
• IgM response at 3-6 weeks
• Doxycycline, amoxicillin, cefuroxime
What was the first discovered tick-bourne disease?

a. Lyme Disease
b. Texas Fever
c. Vikings fever
d. Rocky Mountain Spotted Fever
e. Anaplasmosis
f. Tic douloureux
Texas Fever 1890s
M is for Multiple endocrine neoplasia type II

Enlarged lips and multiple mucosal neuromas on the tongue of a patient with MEN 2b
MEN 2b

- autosomal dominant disorder
- Medullary thyroid cancer and Pheochromocytoma, but not hyperparathyroidism.
- mucosal neuromas, typically involving the lips and tongue, eyelid margins, conjunctivae, lips, palate, nasal and laryngeal mucosa
- Prominent lips and circumoral lentigines
- intestinal ganglioneuromas, disturbances of colonic function are common, including chronic constipation and megacolon
- Marfanoid habitus.
N is for Neoplasm
Squamous Cell Carcinoma

• The most common malignancy of the oral cavity
• Affects mostly middle-aged or elderly men
• Significant association with the use of tobacco and alcohol
• Most common intraoral sites are the lateral and ventral surfaces of the tongue and floor of the mouth
O is for Oral hairy Leukoplakia
Oral Hairy Leukoplakia

- Raised white “hairy” patches on lateral border of tongue
- Seen in HIV or other immunodeficiency states
- Associated with EBV infection
P is for Pyoderma Gangrenosum

- Tender papulopustule that rapidly progresses to an ulcer with undermined border
- Need skin biopsy and culture to rule out infection
- Inflammatory bowel disease, arthritis, monoclonal gammopathy and lymphoproliferative disorders
- Systemic corticosteroids
P is also for Percussion
And while we are a it….

Rene Theophile
Hyacinthe Laennec
1781-1826
13 September 1816

Augustus Bozzi Granville was studying with Laennec

“application of the hand of little avail on account of the great degree of fatness… (auscultation) being rendered inadmissible by the age and sex of the patient I happened to recollect a well known fact in acoustics…” Laennec
Q is for Quincke’s syndrome
Heinrich Irenaeus Quincke

- Introduced the lumbar puncture
- Hereditary angioneurotic edema, autosomal dominant, involving the larynx and viscera.
- Abdominal pain, and has occasional severe and fatal respiratory complications.
- C1 esterase inhibitor deficiency.
- 80% quantitative, 20% qualitative
- r/o angio edema which is drug related
R is for (fever, headache, rash)
R is for Rocky Mountain Spotted Fever

- *Rickettsia rickettsii*, Dermacentor tick
- Flu like syndrome with rash at day 2-4
- Red macules on wrists and ankles
- Develops petechiae and spreads to trunk
- Need special DIF, PCR or immunoenzyme antibodies to detect organism in skin biopsies
- Serology positive at 2 weeks
S is for
S is for Scabies

- *Sarcoptes scabiei*
- Close contact or fomites
- Crusted cases in patients with compromised immune systems or decreased sensory function
- 2 topical treatments (1 week apart) to patient and all family members, close contacts.
- Oral Ivermectin is easy but not FDA approved
S IS ALSO FOR Scrotal Tongue

- Melkerson- Rosenthal
  - Facial nerve palsy
  - Chelitis granulomatosis
  - Scrotal tongue
Hereditary Hemorrhagic Telangiectasia a.k.a. Osler-Weber-Rendu
Osler-Weber-Rendu disease

• autosomal dominant condition
• papular or mat-like telangiectasias on the mucous membranes are not seen until adolescence or later
• Telangiectasias are most commonly seen on the face, tongue lips, nasal mucosa, hands, fingertips and distal upper extremities. Lesions increase in size and number as the patient ages.
• AVMs are most commonly found in the gastrointestinal tract, lung and brain, but can also occur in the liver, spleen, adrenal glands and urinary tract.
U is for
U is for Pressure Ulcer
Stage 1

Intact skin with non-blanchable redness of a localized area usually over a bony prominence
Stage II

Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough.
Stage III

Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling.
Stage IV

Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often include undermining and tunneling.
SUSPECTED DEEP TISSUE INJURY

Purple or maroon localized area of discolored intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear
Unstageable

Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black)
Prevention

Pressure relief

- Positioning, turning, wedges to ankles and knees
- Heel protectors (20% of all pressure ulcers)
- Limit shear forces

Pressure reducing devices

- Mattress pads
- Dynamic support devices

General

- Medication adjustment
- Skin care
- Nutrition
- Early mobility
- Incontinence control

Popular Science 1947
V is for Vital Signs!
V is also for
Effects of portal hypertension
- Esophageal varices
- Hematemesis
  - Gastropathy
- Melena
- Splenomegaly
- Dilated abdominal veins (caput medusae)
- Ascites
- Rectal varices (hemorrhoids)

Effects of liver cell failure
- Coma
- Feter hepaticus (breath smells like a freshly opened corpse)
- Spider nevi
- Gynecomastia
- Jaundice
- Ascites
- Loss of sexual hair
- Testicular atrophy
- Liver "flap" (coarse hand tremor)
- Bleeding tendency (decreased prothrombin)
- Anemia
  - Macrocytic
  - Iron deficiency (blood loss)
- Ankle edema

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V is for *Vibrio vulnificus*

- Gram negative bacteria
- Skin infections, septicemia
- Liver disease, diabetes, immunosuppression
- Ingestion of raw seafood or exposure to contaminated water
- Blood culture or wound culture
- Treatment: tetracycline, chloramphenicol or aminoglycosides
W is for Wegner’s granulomatosis
Wegener’s Granulomatosis

- Systemic vasculitis of the medium and small arteries, as well as the venules, arterioles, and occasionally large arteries that can involve the skin and oral mucosa
- Necrotizing granulomatous inflammation of the upper and lower respiratory tracts
- Glomerulonephritis
X is for Xerostomia
A dry mouth

- Tongue is dry, fissured and inflamed
- Drugs-anticholinergics-TRIADs, antihistamines
- Medical Conditions- collagen vascular (Sjogren’s), dehydration, mumps, MS, AIDS, post-XRT
- concurrent Glossopyrosis (burning tongue)
- Dysgeusia and halitosis
- Treatment-artificial saliva, pilocarpine, nutritional and dental hygiene counseling
X is also for
X is for Xanthomas, eruptive

- Most common cause is hyperlipidemia but can signal monoclonal gammopathy
- Primary or secondary hypertriglyceridemia
- Obesity, high calorie intake, diabetes, alcohol, estrogen use and retinoid therapy
- Lowering triglyceride levels results in resolution
Y is for
Y is for Yellow Nail Syndrome

Primary lymphedema associated with yellow nails pleural effusion
40% have bronchiectasis
Chronic Sinusitis common
Lymphatic hypoplasia
Z is for Zinc
Zinc Deficiency

Skin Findings
• Alopecia
• Blepharitis
• Delayed wound healing
• Dermatitis (especially mouth and anus)
• Glossitis
• Paronychia

What Zinc Does
• Intrinsic metal component or enzymatic activating factor
• Immune response (IL-2), hormone response, wound healing
• May have inhibiting effect on some pathogens (Cholera/E. coli)
In Conclusion

- The Physical Exam is essential!
- Vital Signs are Vital!
- The Alphabet is tricky!
The End