

Random Highlights

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Women's Health: Vaginal Discharge

22 year old sexually active female c/o vaginal discharge. Pelvic shows:

Thin gray-white d/c, pH 5, and a strong fishy odor when making the KOH slide.

Dx?

Bacterial vaginosis

Treatment?

Flagyl 500 mg PO q 12 hours x 7 days (Safe in Preg)

+ clue cells

Caused by Gardnerella



Women's Health: Vaginal Discharge

22 year old sexually active female c/o vaginal discharge.
Pelvic shows:

pH < 4, vulvar erythema, thick white d/c adherent to the vaginal walls

Dx?

Candida

Treatment?

Fluconazole (Diflucan) 150 mg PO x 1

Treatment if pregnant?

Clotrimazole or Miconazole PV x 7 days

pH < 4.5

KOH budding yeast and hyphae



Women's Health: Vaginal Discharge

22 year old sexually active female c/o vaginal discharge. Pelvic shows:

pH > 4.5, wet mount with motile organisms

Dx?

Trichomonas

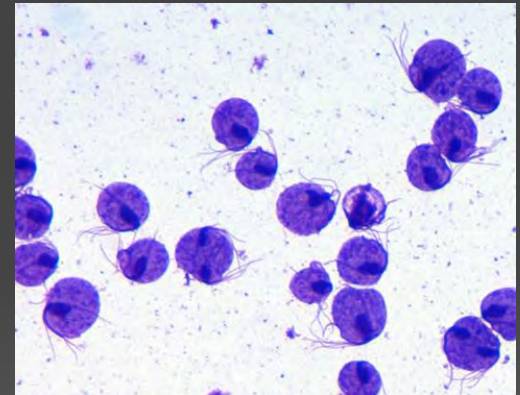
Treatment?

Metronidazole 2 gm PO x 1 dose

pH > 4.5

Motile flagellated organisms on wet mount

Discharge can be clear, white, yellow, or green



Women's Health: Vaginal Discharge

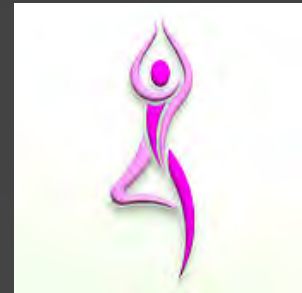
13 year old sexually active female c/o vaginal discharge.

Pelvic shows:

pH < 4.5, many WBCs on wet mount, otherwise normal slide

Most likely cause:

- A. Bacterial vaginosis
- B. Trichomoniasis
- C. Physiologic discharge
- D. Chlamydia
- E. Candida



pH < 4.5, leukorrhea, predominance of WBCs on wet mount, no treatment needed, typically starts several months before menses

Women's Health: Vaginal Discharge

22 year old sexually active female c/o thick yellow vaginal discharge and right-sided pelvic pain. Pelvic shows: cherry red cervix, cervical motion tenderness, thick discharge from os.

Next step?

- A. Ultrasound
- B. Ultrasound with doppler flow
- C. IM ceftriaxone + oral doxycycline
- D. CT without contrast

PID

Usually GC/Chl, can cause infertility, ectopic pregnancy

Tx: Ceftriaxone 250 mg IM + Doxy 100 mg PO x 14 days +/- metronidazole 500 mg BID x 14 days

Tx if severe: IV 3rd gen cephalosporin and then as above

Women's Health: Pelvic Pain

Sudden onset, unilateral, N/V, may be febrile:

Dx?

Ovarian torsion

Testing?

Ultrasound with doppler flow

Tx?

Surgery

Women's Health: Cancer Risks

Endometrial:

High estrogen levels

- Early menarche, late menopause, nulliparous, obesity, PCOS, unopposed estrogen

Ovarian:

- Family history, infertility, endometriosis, smoking (mucinous), unopposed estrogen

Cervical:

- HPV

Women's Health: Menstrual Disorders

Menorrhagia- abnormally heavy or prolonged

Metrorrhagia- irregular intervals

Menometrorrhagia- abnormally heavy or prolonged occurring irregularly/more frequently than normal

Dysmenorrhea- painful

Polymenorrhea- cycle 21 days or fewer

Oligomenorrhea- infrequent, often light menstrual periods (intervals > 35 days)

Amenorrhea- Absent menstruation in reproductive age woman

Pharmacy



Anticholinergic Properties

“Dry as a bone, red as a beet,
mad as a hatter”

- Ataxia
- Tachycardia
- Urinary retention
- Ileus
- Dry mouth
- Confusion
- Speech problems
- Visual disturbance (mydriasis)
- Flushing

Examples:

Antidepressants
(Amitriptyline)

Antihistamine
(Benadryl)

Antispasmodic
(Dicyclomine)

Muscle Relaxants
(Cyclobenzaprine)

Urinary Incontinence Med
(Detrol, Ditropan)

Pharmacy

Coumadin Interactions:

- Garlic
- Ginger
- Gingko
- Ginseng
- Feverfew
- CoQ10



Pharmacy: Pre-Op

Pre-op Discontinuation Timing:

ASA

7 days

NSAID

3 days

Warfarin

4-5 days

Heparin

5 hours

Lovenox

12-24 hours

Plavix

7-10 days



Obesity



Cardiology: Endocarditis

ENDOCARDITIS

DUKE MAJOR CRITERIA

- TWO POSITIVE BLOOD CULTURES
- POSITIVE ECHO
- NEW REGURGITANT MURMUR

DUKE MINOR CRITERIA

- PREDISPOSING CONDITION
- FEVER
- IMMUNOLOGIC SIGNS
- ONE POSITIVE BLOOD CULTURE
- POSITIVE ECHO NOT MEETING MAJOR CRITERIA

DUKE CRITERIA FOR DIAGNOSIS

2 MAJOR OR 1 MAJOR, 3 MINOR OR 5 MINOR

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Duke Criteria

Anticoagulation for Non-Valvular A Fib

CHAD2

CHF

HTN

Age > 75 yrs

DM

Stroke/TIA (2 points)

Score 0 = ASA

Score 1-2 = ASA or Warfarin depending on risk/benefit

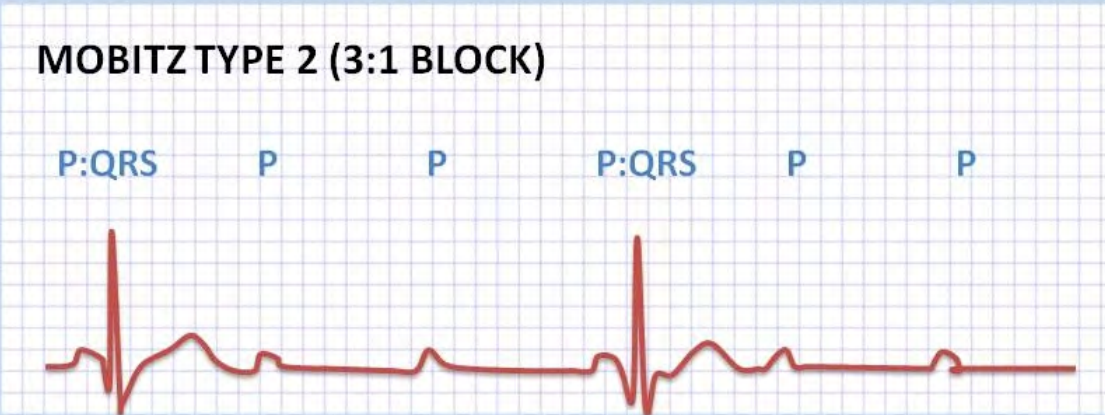
Score \geq 3 = Warfarin

Cardiology: Conduction Abnl

MOBITZ TYPE 1



MOBITZ TYPE 2 (3:1 BLOCK)



Endocrinology: Thyroid

Hyperthyroid

Grave's

TSH recep ab

Increased RAI uptake

Tx: PTU (#1 preg)

Hypothyroid

Hashimoto's

High TSH, Low T4

Galactorrhea

TSH effect on
prolactin secretion

Nodules

Check TSH

TSH low = scan

TSH high = U/S, and
if nodule, then biopsy

TSH normal = FNA bx

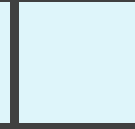
FNA

Malignant = Surgery

Benign = Watch

Suspicious or follicular
neoplasm = Iodine scan

Cold = Bad



GI: Bloody Diarrhea

E. Coli 0157:H7

- Avoid antibiotics; theoretical risk of HUS

Shigella

Campylobacter

Salmonella

Amebiasis

- Low or no fecal leukocytes

GI: Diarrhea

Traveler's Diarrhea Treatment?

- Cipro

Giardia and C. Diff Treatment?

- Metronidazole

Pediatric Diarrhea Treatment?

- Consider probiotics



GI: Inflammatory Bowel

Crohn's

Transmucosal
Small bowel and colon
Skip lesions
No gross bleeding
Ulcers, fissures, abscesses
Less common extraintest dz
ASCA 60-70% cases, p-ANCA 5-10%
Surgery not curative

Ulcerative Colitis

Mucosal
Rectum and proximally
Continuous
Bloody stool
Gross blood on DRE
Extraintestinal dz common:
eye, pyoderma gangrenosum,
arthritis, ankylosing, clots,
sclerosing cholangitis
P-ANCA 50-70%, ASCA 10-15%
Colectomy curative

Virchow's node



Sir, I have been noting this umbilical node in most of our cancer patients !

Excellent observation sister, I am going to publish a paper on this !



Pulmonary: Pneumonia

Streptococcus pneumoniae #1

S. aureus- cavitory disease

Legionella- water droplet exposure, GI sx,
hyponatremia

Klebsiella- Alcohol abuse, DM

Mycoplasma- young adults, rash, bullous myringitis

Chlamydia pneumoniae- young adults, follows
prolonged ST

Q fever (Coxiella burnetii)- exposure to livestock,
elevated LFTs

Chlamydia psittaci- bird exposure

Pseudomonas- important cause of vent-associated

Pulmonary: Lung Dz

Restrictive

Low FVC

Low/NI FEV1

$FEV1/FVC > .7$

Obstructive

Low/NI FVC

Low FEV1

$FEV1/FVC < .7$



Pulmonary: Asthma

<u>Category</u>	<u>Sx</u>	<u>Lung Function</u>
Mild Intermittent	< 2 d/wk, night < 2x/mo	FEV1 \geq 80% FEV1/FVC NI
Mild Persistent	> 2x/wk, night 3-4x/mo	Same as above except not necessarily ni b/t attacks
Moderate Persistent	Daily sx, night >1 x/wk	FEV1 > 60% to < 80% FEV1/FVC down 5%
Severe Persistent	Daily, continual	FEV1 < 60%, FEV1/FVC reduced > 5%

ID: HIV

CD 4 < 150-200 = PCP

CD4 < 50 = CMV

Prophylaxis

PCP CD4 < 200

Toxoplasma CD4 < 100

MAC CD4 < 50

Use: TMP-SMX or dapsonsone

Use: Same as above

Use: Azithro or
Clarithro or
Rifabutin

ID: Tick-Borne Dx

Babesiosis	Cattle, dogs, rodents, deer	Coastal East, Mexico, MD, etc.
Tularemia	Rabbits	US, Canada
Ehrlichiosis	Dogs, deer	Japan, S. US
Rocky Mtn	Mammals	SE and S. US
- Rash on palms and soles		



ID: Fungal

Aspergillus

Soil, compost

Cryptococcus

Bird droppings, pigeon

Coccidioides

San Joaquin Valley, SW US

Histoplasma

Bird and bat droppings, Miss. and Ohio River valley, spelunking, chicken coops

Blastomyces

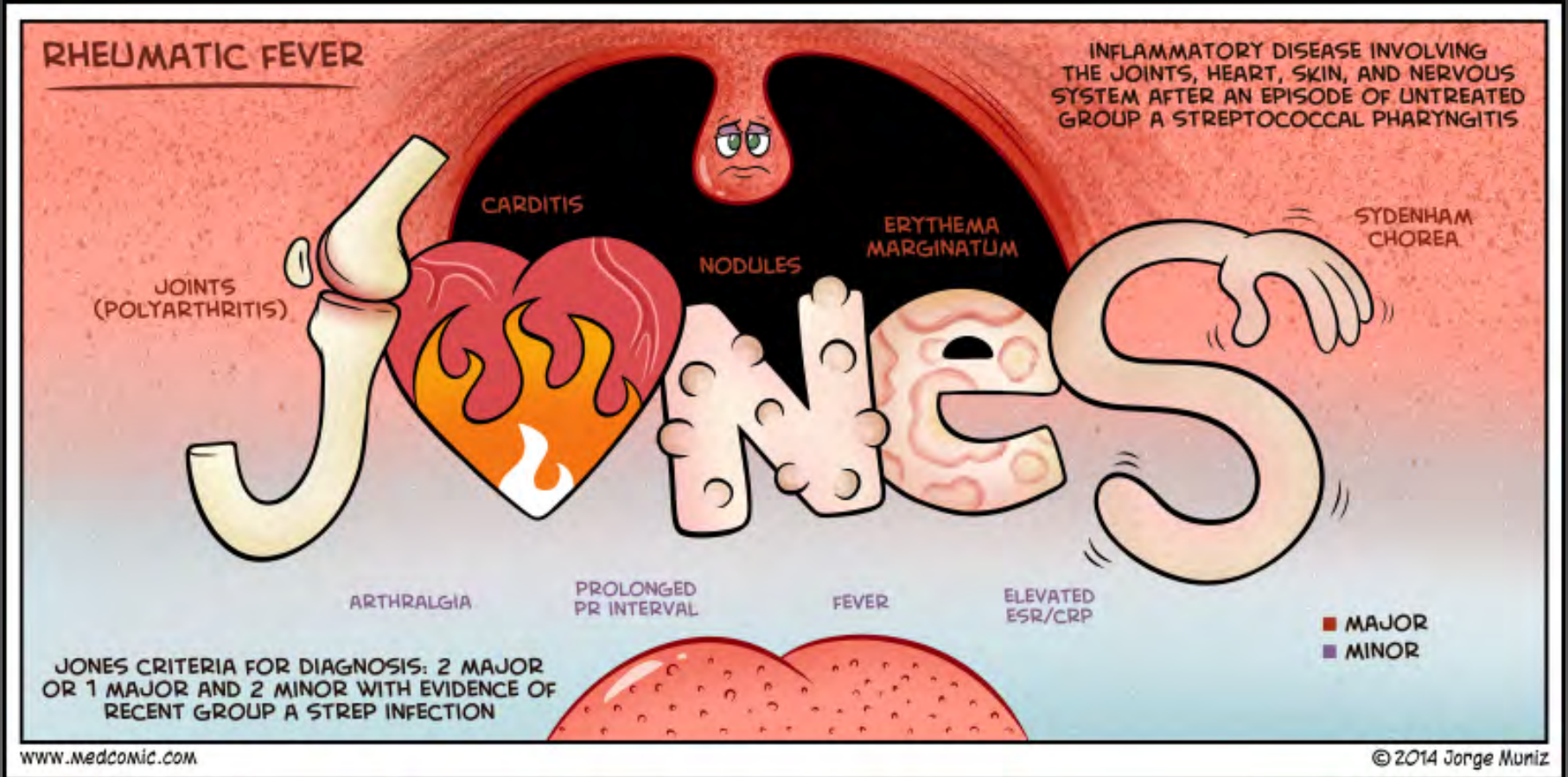
Great Lakes region, forests and streams

Sporothrix

Rose bushes



ID: Rheumatic Fever



Hematology

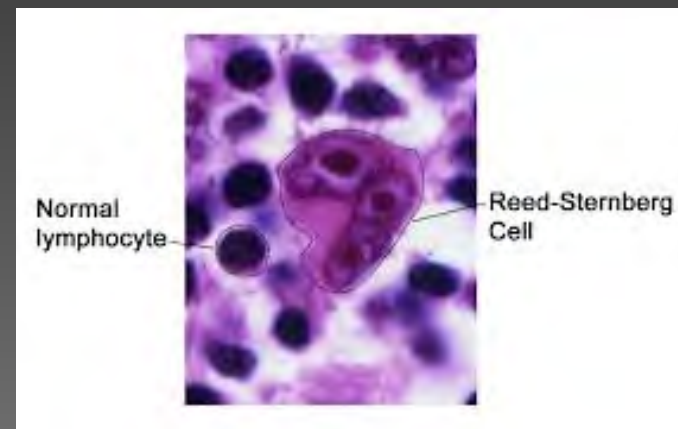
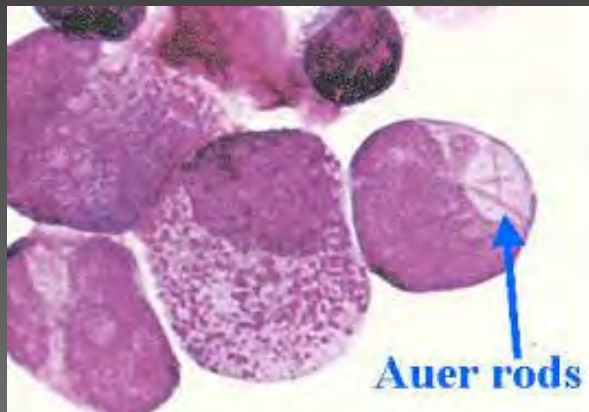
ALL – Kids, Down Syndrome

AML – Auer rods

CLL - #1 in adults, smudge cells

CML - Philadelphia

Hodgkin's – B-cell, Reed-Sternberg



Renal Casts

RBC Casts

Glomerulonephritis

WBC Casts

Pyelonephritis, interstitial nephritis

Renal Epi Cell Casts

ATN





Broad, Waxy Casts

CRF

Hyaline

Febrile, after exercise,
diuretics (dehydration state)
- Does not indicate renal
disease

Assessing patient with acute renal failure –
Urinary Casts

Red cell casts	Glomerulonephritis Vasculitis	
White Cell casts	Acute Interstitial nephritis	
Fatty casts	Nephrotic syndrome, Minimal change disease	
Muddy Brown casts	Acute tubular necrosis	

Renal

Treat hyponatremia slowly to prevent:

CENTRAL PONTINE MYELINOLYSIS

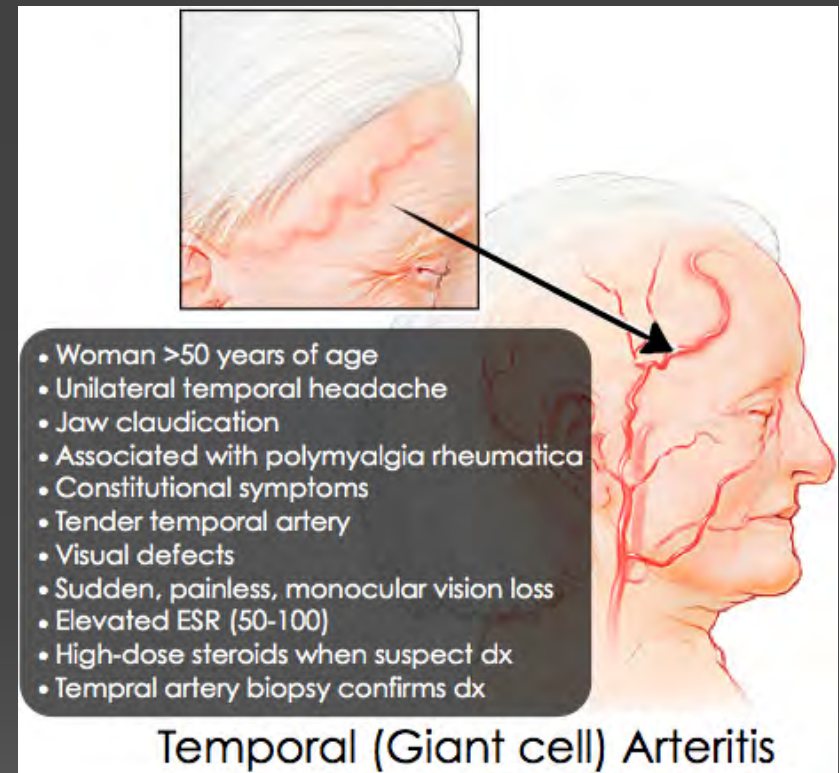
Neurology: Temporal Arteritis

Women > 50 y/o

Sx: New temporal h/a
Transient visual loss
Scalp TTP
Jaw claudication
PMR

Lab: ESR > 50

Tx: Prednisone 60 mg daily for 1-2 mo, slow taper.
ASA to decrease risk of stroke or vision loss



Neurology: Strokes/Bleeds

TPA timing for ischemic strokes

- Within 3-4.5 hours of event

Epidural Hematoma

- Middle meningeal artery
- Elliptical shape on noncontrast CT

Subdural Hematoma

- Bridging Veins
- Crescent shape on noncontrast CT

Neurology: Dystrophies

X-linked recessive:

Duchenne Age 1-5 Pelvic and shoulder girdle; fatal

Becker Age 5-25 Slow progression

Misc inherited:

Limb-girdle Age 10-30 Pelvic and shoulder; Calf hypertrophy

Autosomal dominant:

Fascioscapulohumeral Face and shoulder, moving down

Myotonic “Spasming” facial, SCM, distal ext; baldness, cataracts, gonadal atrophy, cardiac abnl, mental retardation, endocrinopathy

Surgery: Hemorrhoids

Thrombosed external hemorrhoid treatment:

< 48 hours after sx onset?

EXCISION

48-72 hours after onset?

SX TX, REASSURANCE

Geriatrics: Dementia

Aphasia- can't understand and/or make speech

Apraxia- difficulty carrying out learned activities

Agnosia- unable to recognize objects

Lewy Body

Visual hallucinations

Parkinson's

Frontotemporal

Personality change



Geriatrics: Osteoporosis

Use T-score (compares to healthy young adults)

Osteoporosis

T-score ≤ -2.5

Tx:

Calcium 1500 mg/day

Vit D 800 IU / day

Bisphosphonates 1st line medications



Normal People



Yeah! Three
day weekend!
Sleeping in,
shopping,
relaxing.
Awesome!

Med Students

Woo a whole
extra day
to study,
catch up on
lectures, and
maybe sleep in
'til 7:30!!!