

Urgent Care Clinical Medicine

Survival-Sink or Swim-Beginning as a new provider

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Survival- Sink or Swim- Beginning as a new provider



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Before you Begin

- Web Resources
- Professional Clothes
- Stethoscope
- Tape Measure
- Flashlight
- Magnifying glass
- Poison Control #
- BLS, ACLS, PALS

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Who to call

- Mentor
- Pharmacy
- Poison Control
- Local ER
- Local attendings
- Burn Center
- Psychiatric ER

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Most Common Diagnosis in Urgent Care

- Wound, infection
- Sinusitis
- Upper Respiratory Infection
- Bronchitis
- Otitis
- Pharyngitis
- Fracture
- Muscle Sprain
- Conjunctivitis
- Cough
- Abdominal Pain
- UTI
- Joint Pain

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Top Medications in Urgent Care

- Antibiotics
- Steroids
- Pain Medication
- Inhalers
- Cough medications
- Anti emetics
- Allergy medications
- Muscle relaxers

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Most common scenario's

- Cardiac
- Pulmonary
- ENT
- Dermatology
- GI
- Orthopedics
- Neurology
- Gynecology/Urology
- Psychiatry

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UCCC Cardiology

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Cardiology

- Hypertension
- Palpitation
- Syncope
- Chest Pain
- Costochondritis

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Cardiology

- Variety of Issues from benign to life threatening
- Triage protocol for staff
- See these patients first to make a quick assessment

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Cardiology-Hypertension

- Hypertension
 - New Onset Symptoms
 - Medication Refill
 - Medication Restart
 - When to start medication, wait for PCP and sent to ER

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Cardiology

- Hypertension
 - New onset Symptoms
 - Headache
 - Vision Changes
 - Red Face
 - High BP reading
 - Guidelines regarding new med starts
 - Hypertensive Urgency vs Emergency

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Cardiology

- Hypertensive Urgency versus Emergency
 - Urgency SBP >180mmHg DBP >110 **WITHOUT** evidence of end organ damage
 - End Organ Damage- need labs?
 - Monitor BP over hours

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Cardiology

- Physical Exam to evaluate end organ damage
 - General- appearance over weight, alertness
 - Blood Pressure- both arms
 - Funduscopic
 - Neck-thyroid, palpable carotid
 - Cardiac- size, rhythm, sounds
 - Lungs- rales
 - Abdomen- masses, bruits
 - Extremities- peripheral pulses
 - Neurological Exam

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Cardiology

- Hypertension Causes
 - CVA
 - Pulmonary Edema
 - Myocardial Infarction
 - Cocaine
 - Pheochromocytoma
 - SAH
 - Encephalopathy
 - Kidney Injury

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Cardiology

- Hypertension
 - EKG
 - Starting Medication
 - Which Medications?
 - For how long?
 - What kind of Follow up?

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Cardiology

- Medication
 - New Start
 - Beta Blockers
 - ACE
 - ARBs
 - Calcium Channel Blockers (NOT nifedipine)

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Cardiology Palpitations

- Palpitations
 - How to evaluate thoroughly and rapidly
 - Most new onset arrhythmias are going to ER or cardiology- which goes where?
 - How to decide

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Cardiology

- Palpitations
 - Great Differential mostly **cardiac and psychiatric**
 - Risk factors identifying cardiac origin
 - History Clues
 - Description of sensation/onset/ duration/ precipitating factors
 - Physical
 - Identifying murmurs
 - EKG
 - 12 lead ALWAYS
 - Ruling out emergent conditions

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Cardiology

- 4 factors pointing to cardiac
 - Male
 - Description of irregular heartbeat
 - History of cardiac disease
 - Event duration >5 minutes

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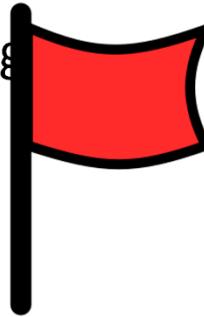
Cardiology

- History
 - Characteristic
 - Sensation
 - Age of onset
 - Associations with position changes or Valsalva
 - Psychiatric history
 - Medication history
 - Medical History- hypoglycemia, pregnancy, thyroid issues, perimenopausal

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Cardiology



- **RED FLAGS**

- Changes in Palpitation
- Dyspnea
- LOC
- Chest Pain
- Diaphoresis
- Dizziness

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Cardiology

- Physical Exam
 - Vital Signs, Murmurs
- EKG
 - 12 lead always
 - WPW
 - LVH
 - Q waves, P waves
 - Prolonged QT

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Cardiology

- Labs
- Non Emergent
 - Palpitation Sensation but no danger Signs
 - Further Testing
 - Cardiac referral
 - Holter
 - Loop
 - EP testing

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Cardiology

- Emergency Room
 - Abnormal EKGs
 - Abnormal Physical- VS, Murmur
 - Concerning Symptoms
 - Dizziness, Chest pain, Dyspnea, LOC, Change from baseline or event duration
 - 4 Risk Factors- Male, Describe Irregular Heartbeat, History of Cardiac Disease, Event duration >5 minutes

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Cardiology Syncope

- **Syncope**
 - Episode details
 - Risk Stratifying Clues
 - Diagnostic Criteria for specific types of syncope

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Cardiology

- **Syncope**
 - Episode Details
 - Stratifying Clues
 - No Complete LOC
 - LOC-transient rapid onset and short duration
 - Recovery spontaneous and complete
 - No loss of postural tone

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Cardiology

- Syncope
 - Medical History
 - Provocation Symptoms
 - Neural reflex mediation
 - History medications
 - Illicit drugs
 - Medications- OTC

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Cardiology

- Differential
 - Psychiatric
 - Situational
 - Orthostatic
 - Cardiac
 - Arrhythmia
 - PE
 - Pulmonary Hypertension
 - Aortic Stenosis
 - MI
 - Aortic Dissection

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Cardiology

– Physical Exam

- General Clues
 - VS- orthostatic, hyperventilation, check Blood Glucose
- Cardiac
 - Murmurs, Valsalva, Heart Rate
- Psychiatric
 - Emotional State
- Neurological
- EKG

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Cardiology



• RED FLAGS

- Severe headache
- Neurological changes
- Chest Pain
- Exertional Onset
- Dyspnea
- Palpitations
- Ataxia
- Dysarthria
- Diplopia
- Hypotension

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Cardiology

- Syncope
 - Risk Stratification
 - High Risk- ER
 - Low Risk- Cardiology referral in short time frame
 - Stratifying Clues
 - » No Complete LOC
 - » LOC-transient rapid onset and short duration
 - » Recovery spontaneous and complete
 - » No loss of postural tone

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Cardiology Chest Pain

- Chest Pain
 - Common Causes
 - History
 - Physical
 - Who to send to ER

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Cardiology

- Chest Pain
 - Common Causes
 - Musculoskeletal
 - Gastrointestinal
 - Non Specific
 - Ischemic
 - Respiratory
 - Psychiatric

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Cardiology

- Identifying High Risk Factors
 - Male >55
 - Female >65
 - CAD
 - Non reproducible
 - Worsened by exercise
 - Patients assumes cardiac origin
 - = if one or less factors present= <1% AMI

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Bosner et.al.,2010.

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Cardiology

- PQRST
 - Provokes
 - Palliates
 - Quality
 - Region
 - Radiates
 - Severity
 - Timing

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Cardiology

- **HEART Score**
 - Highly Suspicious
 - Highly Suspicious 2 pts
 - Moderately Suspicious- 1 pt
 - EKG
 - ST depression 2 pts
 - Non Specific ST changes 1 pt
 - AGE
 - >65 2 pts
 - 46-65 1 pt
 - Risk Factors
 - >3 Risk factors 2 pts
 - 1-2 Risk factors 1 pt
 - Troponin
 - >3 x normal 2 pts
 - 1-3 x normal 1 pt
- Score of 3 or less= Very Low Risk

Nieuwets et al , 2016

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Cardiology

- Physical Exam Clues
 - General
 - Cardiovascular
 - Pulmonary
 - Abdomen
 - Extremities
 - Skin

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Cardiology

- EKG
 - ST Elevation >1mm
 - New LBBB
 - Hyperacute T waves

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Cardiology

— RED FLAGS -DON'T MISS- PE, Aortic Dissection, Pneumothorax



- History
 - PQRST
 - Risk Factors
- Physical Exam
- EKG Findings
- Disposition

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33 A speaker icon with three curved lines above it, indicating audio content.

Cardiology- Costochondritis

- Costochondritis
 - Symptoms
 - Pain at costochondral junctions in anterior chest wall
 - Often follows illness or injury
 - Physical
 - Pain to palpation

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34 A speaker icon with three curved lines above it, indicating audio content.

Cardiology

- Costochondritis

- Work Up

- >35yo, Hx CAD, with cardio-pulmonary symptoms
 - EKG
 - CXR
 - CT

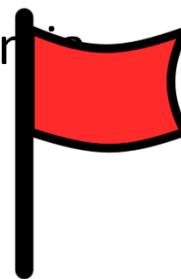
- Treatment

- NSAIDS, Acetaminophen
 - Heat, Ice
 - Injections

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Hyperglycemia



- Elevated Blood sugar
- Symptomatic ?
- History of DM1 or DM2?
- Biggest Worries
 - DKA
 - HHS
- ***Medical Emergencies***

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Diabetic Ketoacidosis

- Blood Sugar > 250 mg/dL
- pH < 7.3
- Bicarbonate < 15 mEq/L
- Ketones+ urine and serum
- Treatment
 - 911
 - IV Fluids
 - Insulin
 - Electrolyte Replacement

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HHS- Hyperosmolar Hyperglycemic State

- Increased Osmotic Pressure
 - Excessive Urination
 - Focal Neuro Changes- tremors, MS Changes, Seizures
 - BS >600
 - Bicarb >18mEq/L
 - Serum ketones
 - Serum Osmolality >320 mOsm/kg
 - Stupor/ Coma

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HHS

- Call 911
- ACLS
- Normalize BS
- Insulin
- Oxygen
- EKG
- IV Fluids
- STAT Labs

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Cardiology

- Completed!

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Images

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UCCC Ophthalmology

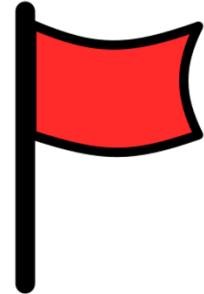


Ophthalmology

- Conjunctivitis
- Corneal Abrasion
- Infections
- Inflammatory Issues
- Eyelid Disorder
- Emergencies



Ophthalmology



- **RED FLAGS**

- Severe Pain
- Cranial Nerve Abnormalities
- Photophobia
- Fixed pupil
- Acute Vision Changes
- Status Post Trauma
- Systemic Symptoms
 - Fever, chills, headache, nausea, vomiting



Ophthalmology

- Conjunctivitis

- Allergic
 - Symptoms-
 - Pruritus bilaterally, all day, clear/watery discharge
 - Physical Exam
 - Hyperemia, watery discharge, chemosis
 - Treatments
 - Antihistamine/vasoconstrictors- naphazoline- pheniramine qid
 - Antihistamine/mast cell stabilizer-olopatadine, azelastine bid
 - Artificial Tears





Figure 2. Heilman,2013



Ophthalmology

- Conjunctivitis
 - Viral
 - Symptoms
 - URI Sx, watery or mucous discharge, burning, gritty feeling
 - Physical Exam
 - Mucous discharge- conjunctiva follicular appearing
 - Treatment
 - Supportive care
 - Rewetting drops
 - Watch for **Keratoconjunctivitis**





Figure 3. Mayor,2014.



Ophthalmology

- Conjunctivitis
 - Bacterial
 - Symptoms
 - Discharge purulent discharge- crusted in morning
 - Physical Exam
 - Copious purulent discharge
 - Treatment
 - Erythromycin ointment q6 x7 days
 - Trimethoprim-polymyxin B 0.1% 2 drops q6 x 7 days
 - Azithromycin 1% 1 drop bid x 2 days then 1 drop daily x 5 days
 - Ciprofloxacin 0.3% drops 2 drops q 6 x 5 days (CONTACT WEARER)





Figure 1. Tanaki, 2008.



Ophthalmology

- Corneal Abrasion
 - History of trauma then pain
 - Symptoms
 - FB sensation, possibly photophobia, tearing
 - Exam
 - Funduscopic Exam
 - Fluorescein Exam
 - Red Flags
 - Vision Changes
 - Trauma from metal, glass or Organic material, retained fragments
 - Ulcer
 - Pupil Irregularities
 - Hyphema

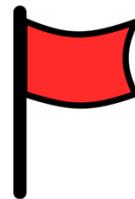
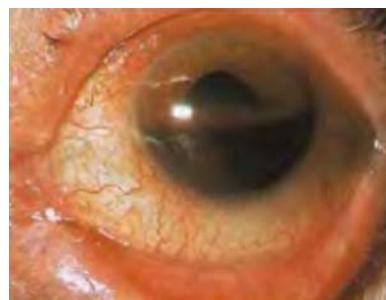


Figure 4 . Heilman,
2010.



▶

Figure 5. Ahuja,2006.



▶

Ophthalmology

– Treatment

- Pain management
 - Tylenol, NSAIDS
- Topical Antibiotic
 - Erythromycin or Bacitracin ointment $\frac{1}{2}$ in ribbon tid
 - Ciprofloxacin 0.3% (Contact users) 1 drop q 15 min x 6 hrs, 2 gtts q 3 hr
 - Moxifloxacin 0.5% 1 drop bid-tid depending on brand
- Lubricating Drops
- Follow up 24 hours
- Counseling on protective eyewear



Ophthalmology

• Infection

– Hordeolum

- Purulent inflammation of eyelid
- Treat with warm compresses
- If infection suspected oral antibiotics

– Preseptal Cellulitis

- Mild Symptoms- no pain, no vision change, no CN involvement, no systemic sx
- Clindamycin, TMP/SMZ, Amoxicillin/Clavulanate, Doxycycline
- If danger Symptoms- IMMEDIATE REFERRAL
- Follow up 24 hours





Figure 6



Figure 7

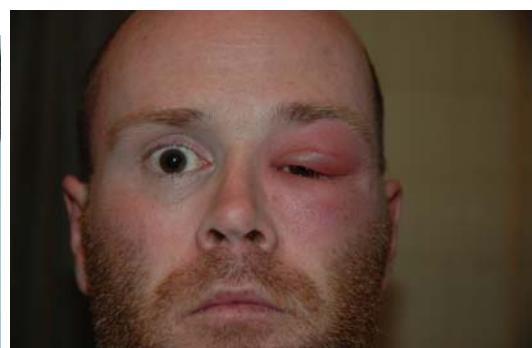


Figure 8. Tripp,2006.



Ophthalmology

- Inflammation
 - Chalazion
 - Obstruction of lid tear duct, nodule on lid
 - Warm compresses
 - Blepharitis
 - Irritation and erythema of eyelashes
 - Warm scrubs, artificial tears



Figure 9. Kotek,1986.



Figure 10



Ophthalmology

- **Herpes Zoster Ophthalmicus**
 - Zoster with trigeminal nerve ophthalmic branch
 - Symptoms
 - Fever, pain, pruritis, fatigue, rash
 - Treatment
 - Oral Acyclovir 800 mg 5 times daily valacyclovir 1 gm tid x 7 days and drops
 - Steroid drops(by ophtho only)
 - Ophtho consult
 - Long term complications
 - Keratitis
 - Iritis



• Figure 11.



Figure 12. Sahana, 2015.



Ophthalmology

- Pterygium
 - Symptoms
 - Eye irritation, unilateral, can impair vision
 - Physical Exam
 - Conjunctival tissue thickening from medial to cornea
 - Treatment
 - Benign- rewetting drops
 - Ophthalmology consult- surgery if progressing or vision impairment



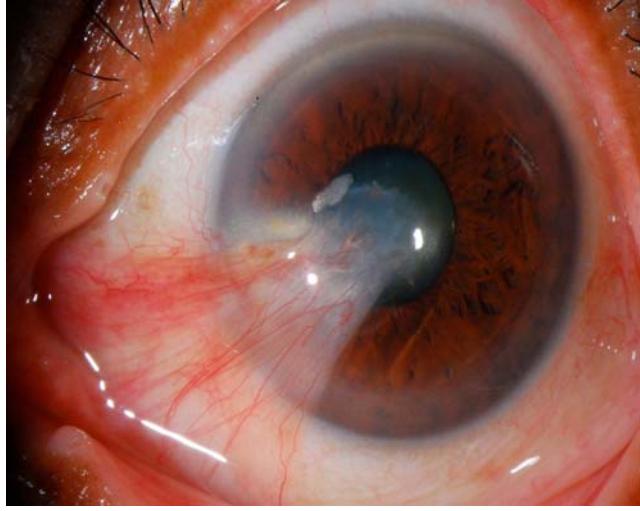
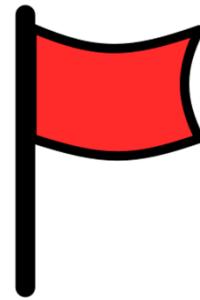


Figure 13. Varas,2008.



Ophthalmology



- **Emergencies**

- Orbital Cellulitis

- Erythema, pain, vision loss, chemosis, photophobia, lid edema, fever

- Retinal Detachment

- Floaters, flashing lights

- Global Injury

- Pain, vision loss +/- trauma

- Chemical Injury

- Pain, tearing, erythema, photophobia

- Investigate which chemical and FLUSH

- Poison Control





Figure 14. Trobe,2011.



Ophthalmology

– Completed



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UCCC Genitourinary

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Genitourinary Topics

- UTI
- Pyelonephritis
- Vaginal Infections
- STIs
- Male Genital Pain
- PrEP



Urinary Tract Infections

- Symptoms
 - Urgency, Frequency, Dysuria, Hematuria, Cramping, Incomplete Urination
- Physical Exam
 - VS- ? Fever
 - Suprapubic Tenderness
 - CVAT
- All infections are presumed until culture returns



- Labs
 - Urine Dipstick
 - Culture- Is it Necessary?
- Treatment Regimen
 - Nitrofurantoin- 100 mg bid x 5 days
 - TMP/SMZ DS- bid x 3 days
 - Fosfomycin- 3 gm single dose IM
 - Pyridium 100-200mg bid with food
- Male UTI treatment
 - TMP/SMZ DS bid x 7 days
 - Ciprofloxacin 500mg bid x 7 days
 - Levofloxacin 500 mg daily x 7 days



Pyelonephritis

- Distinguishing from UTI
 - CVAT, febrile
- Treatment Regimen
 - Ciprofloxacin 500 mg bid x 7 days
 - Levofloxacin 750 mg daily x 7 days
 - Pyridium 100-200 mg bid with food x 2 days

*Always send culture for pyelonephritis

Follow Up 2-3 days



Pelvic Infections

- Patients Often decline an exam
- Discharge vs pelvic pain vs lesion
- History
 - Detailed sexual history, menstrual history, condom use
- Exam
 - Inspection
 - Pelvic
 - Cultures
 - Urine pregnancy
 - Urine dipstick

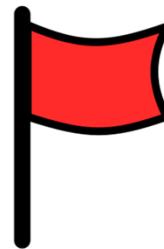


Pelvic Infections

- Internal Exam Findings
 - Discharge
 - Color and consistency
 - Cervical
 - Lesions
 - Strawberry Cervix Appearance
 - Cervical Motion Tenderness
 - Uterine
 - Fixed
 - Tender
 - Enlarged
 - Adnexa
 - Tenderness
 - Masses



Pelvic Infections



– PELVIC EXAM RED FLAGS

- Cervical Motion Tenderness
- Adnexal Tenderness
- Pregnancy



Vaginal Infections



Figure 2

Figure 3

Figure 1. Haggstrom, 2014.



Pelvic Infections

- Testing
 - HIV Testing per state's consent laws
 - STI Panel
 - RPR
 - Hepatitis Panel
 - HSV I ,II, IgG,IgM
 - Gonorrhea
 - Chlamydia
 - Trichomonas, Vaginitis Panel



- Testing
 - Urine
 - Gonorrhea
 - Chlamydia
 - Vaginal Fluid
 - Culture GC/CT
 - Viral Culture
 - Vaginitis Panel -BD affirm
 - Microscopy



Pelvic Infections

- Treatment Regimens
 - HSV
 - Valacyclovir 1000 mg bid x 7-10 days
 - Acyclovir 400 mg tid x 7-10 days
 - HPV
 - Imiquimod-2-3 times per week x 6 hrs
 - Podofilox- apply gel or solution bid x 3 days then 4 days off
 - TCA/BCA
 - Cryotherapy
 - Referral



– Treatments

- Candida

- Terconazole vaginal gel- one appl qhs x 7 nights
 - Fluconazole oral 150 mg po x 1

- Bacterial Vaginosis

- Metronidazole 500 mg bid x 7 days
 - Metronidazole vaginal gel one appl qhs x 5 nights
 - Clindamycin 2% vaginal gel-oner appl qhs x 7 nights



Pelvic Infections

- Treatment

- Gonorrhea- Ceftriaxone IM 250 mg x 1
 - Chlamydia-Azithromycin 1 gm x1, Doxycycline 100 mg bid x 7 days
 - Trichomonas-Metronidazole 500 mg bid x 7 days
 - Syphilis- PCN G 2.4mil units IM
 - PID
 - Ceftriaxone 250mg x1 PLUS
 - Doxycycline 100 mg bid x 14 days PLUS
 - Metronidazole 500 mg bid x 7 days



Pelvic Infections

- Retest
- Prevention
- Reporting
- Partner Treatment



Male

- History
- Exam
 - External Lesion
 - Discharge
- Testing
 - Urine
 - Gonorrhea/Chlamydia
 - Bloodwork
 - STI Panel



Male infections

- Most Common Lesions
 - “It’s eczema right?”



- External Lesions



– Condyloma Accuminata

Figure 4

Figure 5

- Herpes Simplex



Figure 6



Sexually Transmitted Infections

- Treatment Regimens
 - HSV
 - Valacyclovir 1000 mg bid x 7-10 days
 - Acyclovir 400 mg tid x 7-10 days
 - HPV
 - Imiquimod-2-3 times per week x 6 hrs
 - Podofilox- apply gel or solution bid x 3 days then 4 days off
 - TCA/BCA
 - Cryotherapy
 - Referral



Sexually Transmitted Infections

- Treatment
 - Gonorrhea- Ceftriaxone IM 250 mg x 1
 - Chlamydia-Azithromycin 1 gm x1, Doxycycline 100 mg bid x 7 days
 - Trichomonas-Metronidazole 500 mg bid x 7 days
 - Syphilis- PCN G 2.4mil units IM
 - PID
 - Ceftriaxone 250mg x1 PLUS
 - Doxycycline 100 mg bid x 14 days PLUS
 - Metronidazole 500 mg bid x 7 days



Male Genital Pain

- Acute Scrotum
 - Testicular Torsion
 - Any Age
 - Physiology
 - Reversible <12 hours
 - Symptoms
 - Physical Exam
 - High riding testes
 - Cremasteric reflex- **Absent**
 - Edema
 - URGENT REFERRAL ULTRASOUND



- Epididymitis
 - Infectious or Non Infectious
 - Acute or Chronic
 - Symptoms
 - Severe swelling and pain
 - Physical Exam
 - Edema, Erythema, +/- Hydrocele, fever



- Testing
 - STI
 - Treatment
 - Acute –Ceftriaxone 250mg IM x 1 PLUS Doxy 100 mg bid x 10 days
 - MSM-Ceftriaxone PLUS Ofloxacin 300 bid x 10 days or levofloxacin 500 mg x 10 days
- RED FLAGS-Fournier's Gangrene PIC

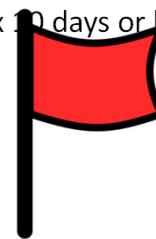


Figure 8, Verma, et al.,2012



High Risk Patient- PrEP

- PrEP Pre Exposure Prophylaxis
- High Risk Qualifiers
 - Sex Workers
 - Multiple Partners
 - No condoms
 - Not for HIV +, Pregnancy (risk versus benefits), <18 yo, Osteoporosis



PrEP

- Pre therapy Labs
 - HIV
 - Baseline creatinine
 - Pregnancy
 - Hepatitis
- Monitoring
 - Every 3 months



PrEP

- Regimen
 - TDF-FTC (tenofovir, disoproxil,fumarate,emtricitabine)
- Efficacy
 - 33-90% depending on population studied



Genitourinary

- Completed!



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UCCC Gastroenterology

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Gastroenterology

- Acute Abdomen
- Gastroenteritis
- Hemorrhoid Treatment
- Thrombosed Hemorrhoid



Gastroenterology- Acute Abdomen

- Acute Abdomen
 - Detailed History
 - Physical Exam
 - Treatment
 - Referral



Gastroenterology

- Acute Abdomen
 - Detailed History
 - Onset
 - Timing
 - Location
 - Characteristics
 - Alleviating/ Aggravating Factors
 - Associated Symptoms



Gastroenterology

– Physical Exam

- General
 - VS
 - Distress
 - Jaundice
 - Dehydration
- Abdomen Acute
 - Appearance-ecchymosis, distention, spider nevi, hernia
 - Auscultate- Bowel Sounds hypoactive, hyperactive
 - Palpation-Masses, Rebound, Guarding
 - Rectal- ?



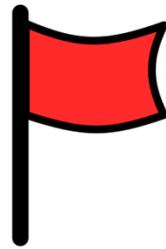
Gastroenterology

• Causes of Abdominal Pain by Area

- Epigastric
- RUQ
- LUQ
- RLQ
- LLQ
- Suprapubic



Gastroenterology



- **RED FLAGS**

- Elderly- flank pain, abdominal pain- AAA
- Acute onset of severe pain -AAA or aortic dissection
- Pain awakening patient from sleep
- Worsening pain
- Abnormal vital signs
- Tender abdominal mass- AAA



Gastroenterology

- **RED FLAGS**

- Pregnancy
- Hernia, surgical scars
- Peritonitis symptoms
- History of trauma
- Pain out of proportion to exam



Gastroenterology

- Deduce Likely Causes
 - Categorize Acute versus Non Acute
- Acute-Imaging versus ER
- Non Acute-appropriately treat and/or referral
 - PUD-PPI+2 antibiotics
 - Gallstones-UDCA
 - Diverticulitis-Ciprofloxacin and metronidazole
 - IBS- probiotics, anti-spasmodics
 - Nephrolithiasis- pain meds, fluids, strain



Gastroenterology- Gastroenteritis

- Gastroenteritis
 - Nausea/ Vomiting/ Diarrhea
 - History
 - Babies- wet diapers and tears?
 - Children-Urination in the last 10 hours
 - Physical Exam
 - Assess hydration status, Babies- Anterior Fontanelle open and flat? depressed?
 - VS- weight loss, tachycardia, resting Hypotension, decreased urination, Skin turgor, change in mental status, MM dry
 - Abdominal Exam-BS, Masses, Tenderness
 - Danger Symptoms



Gastroenterology

- Gastroenteritis
 - Treatment
 - Oral versus IV hydration
 - Anti-emetics
 - Promethazine
 - ondansetron
 - Anti Diarrhea
 - OTC -loperamide or bismuth subsalicylate
 - Dietary changes
 - Probiotics



Gastroenterology

- Infectious Diarrhea
 - E Coli- Travelers Diarrhea
 - TMP/ SMZ DS bid x 5 Days or
 - Cipro 500 mg bid x 3 days
 - C. Diff
 - Metronidazole 500 mg tid x 10-14 days
 - Giardia
 - Metronidazole 250 tid x 5-7 days
 - Entamoeba
 - Metronidazole 500-750 mg tid x 7-10 days
 - **PLUS** paramomoycin 25-30mg/kg/d divided into 3 doses x 7 days



Gastroenterology- Hemorrhoids

- Hemorrhoids
 - Symptoms
 - Pain, pruritus, palpable “bump” around rectum, History of constipation
 - Physical Exam
 - Perirectal tissue extruding, may be flesh colored or blue/black
 - Treatment
 - Consider Other Diagnosis
 - Conservative Treatment
 - Diet – increase fiber and water, Quick BMs, Sitz Baths
 - Anesthetics
 - Benzocaine 5% ointment, lidocaine gel 2%
 - ~~Pramoxine 1% foam~~



Gastroenterology

- Hemorrhoids
 - Treatments Cont'd
 - Astringents
 - Corticosteroids
 - Hydrocortisone 1-2.5% cream
 - Hydrocortisone and pramoxine 2.5%- topical/ rectal foam/ gel/lotion/ointment
 - Vasoactive
 - Topical NTG 0.2% ointment bid
 - Phenylephrine 0.25% ointment qid



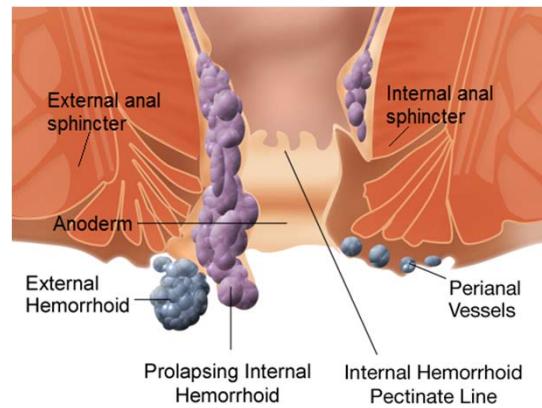


Figure 3



Figure 4. Lohsiriwat, 2015.

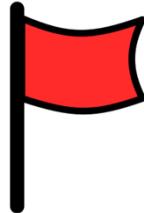


Figure 5. Gulcu et.al.,2014.



Gastroenterology

- Hemorrhoids
 - RED FLAGS
 - Severe
 - Large
 - Very Painful
 - Active Bleeding
 - Anal Prolapse



Gastroenterology

- Hemorrhoid
 - Thrombosed- DO NOT LANCE IF...
 - Grade 4 Internal and External
 - ? Is it a hemorrhoid or unknown rectal mass
 - Coagulopathy
 - IBD
 - Infection
 - Anorectal Fissures
 - Portal HTN



Gastroenterology

- Hemorrhoid
 - Thrombosed-Lance
 - Evaluate size, location, risk factors
 - Get and document Consent
 - Clean area
 - Anesthetize- lido with epi
 - Elliptical Incision far from sphincter
 - Follow Up 2-3 days



Gastroenterology

- Completed!



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UCCC Pulmonology

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Pulmonology

- Cough
- Bronchitis
- Pneumonia
- Asthma/COPD
- Dyspnea



Pulmonology

Cough

Most Common Etiologies

Upper Airway

Asthma

GERD

Infectious



Pulmonology

- Cough
 - Upper Airway Cough Syndrome
 - Etiologies
 - Secretions stimulating cough receptors in upper airway
 - Cold, PND, Allergies, Sinusitis
 - Exam
 - Cobblestone appearance
 - Secretions noted
 - Treatment
 - Glucocorticoids- inhaled #1
 - Oral antihistamines- first, second generation
 - Benzonatate



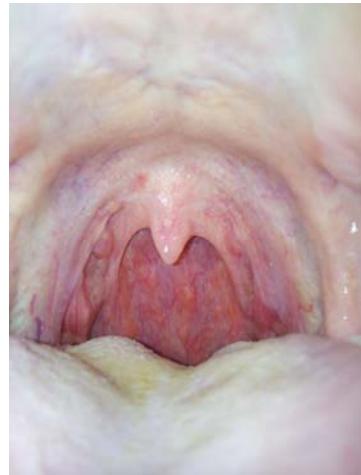


Figure 1



Pulmonology

- **Asthma**
 - History of Family
 - Exposures environmental
 - Exam
 - Expiratory wheezing
 - Treatment
 - LTRA, inhaled glucocorticoids, inhaled bronchodilators, or prednisone if bad
 - Appropriate referrals to PCP within a week, especially children



Pulmonology

- GERD
 - Symptoms
 - Heartburn, worse lying down, acidic taste in mouth, nausea
 - Mechanism of Injury
 - Esophageal sphincter disease-> stimulation of laryngeal receptors by aspiration of gastric contents, acid is distal esophagus- tracheobronchial cough
 - Exam
 - Usually not impressive, normal oropharynx, lungs and abdominal exam



Pulmonology

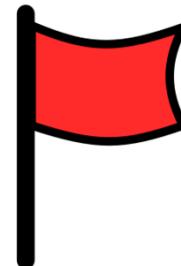
- Treatment
 - Lifestyle
 - Weight Loss
 - Elevate the head of the bed
 - Decrease Smoking
 - Bland diet
 - Upright position 2 hours postprandial
 - Medications
 - omeprazole
 - ranitidine



Pulmonology

– Referral

- Follow Up
- **Red Flags**
 - Black/ Bloody Stool
 - Intractable Abdominal Pain
 - NO response to medication



Pulmonology

• Infections

- Cough can follow viral or bacterial infections
- May persist up to 8 weeks
- Treatment-
 - Cough meds dextromethorphan, benzonatate
 - Pertussis- Azithromycin, TMP/SMZ, clarithromycin
 - PND-inhaled glucocorticoid, antihistamine



Pulmonology

- Medication Induced
 - ACE
- Chronic Bronchitis
 - Cough Most days over 3 months
- Bronchiectasis
 - Persistent Airway Inflammation
- Lung Cancer
 - New, Persistent cough in smoker's
- Chest X-ray
 - Persistent Cough 8 weeks



Pulmonology-Dyspnea

- Clearly Defined
 - Discomfort with breathing
- Acute vs non Acute
- Patient Descriptors
 - Clues for diagnosis- fevers, chest pain, unilateral, DOE
- MMRC Dyspnea Scale



Pulmonology

- MMRC Dyspnea Scale
 - 0=Dyspnea with strenuous exercise
 - 1=Dyspnea with rushing or walking up hills
 - 2=Dyspnea with walking distance
 - 3=Dyspnea with walking 100 yards
 - 4=Dyspnea with dressing

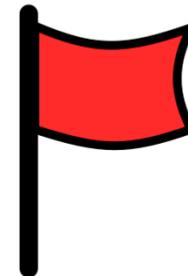


Pulmonology

- Physical Exam
 - Vital Signs-tachypnea, tachycardia, acute distress?
 - Stridor, wheezing, crackles, murmurs, edema
- Ruling out Life Threatening Cause
 - Foreign Object
 - Infection- epiglottitis
 - Airway Trauma
 - Anaphylaxis
 - Asthma
 - Pulmonary Embolism



Pulmonology



- Wells Criteria
 - Clinically Suspect DVT 3pts
 - PE Most likely Diagnosis 3pts
 - Heart Rate >100 1.5 pts
 - Immobilization/ Surgery within 4 weeks 1.5 pts
 - History DVT/PE 1.5 pts
 - Hemoptysis 1 pt
 - Malignancy 1 pt
 - >6=High probability
 - 2-6=Moderate probability
 - <2=Low probability



Pulmonology

- Dyspnea Summary
 - Assess Patient for Stability
 - Rule out life threatening Causes
 - Treat if appropriate
 - Likely Referral



Pulmonology-Asthma

- Symptoms
- Severity Rating Scales
- Physical Exam
- Treatment



Pulmonology

- Asthma
 - Symptoms
 - Pediatrics
 - Current regimen? recent hospitalizations? run out of meds? Intubated ever?
 - Family History
 - Exposures important
 - Exam
 - Expiratory wheezing
 - Accessory Muscle Use
 - CXR?



Pulmonology

- Asthma
 - Chart- Severity Scale
 - PIS-Pulmonary Index Score
 - PASS
 - RAD



Pulmonology

- PIS
 - Pulmonary Index Score
- PASS
 - Pediatric Asthma Severity Scale
- RAD
 - Respiratory Rate
 - Accessory Muscle Use
 - Decreased Breath sounds



Participation in Life Activity Scale and Severity of Illness Rating Scheme

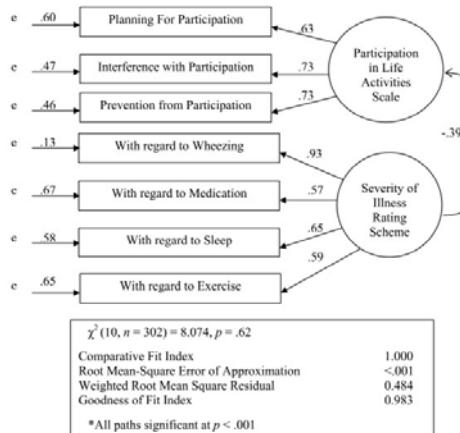


Figure 2, Kintner et al., 2008



Modified PIS

Table 2. The modified Pulmonary Index Score.				Respiratory rate/min		Accessory muscle use	Inhalation - exhalation ratio	Wheezing	Oxygen saturation % (room air)
		<5 years old	≤5 years old	<6 years old	≥6 years old				
0		<120	<100	≤30	≤20	None	2:1	None	96≤
1		120–140	100–120	31–45	21–35	Mild	1:1	End expiratory	93–95
2		141–160	121–140	46–60	36–50	Moderate	1:2	Inspiratory and expiratory wheeze, good aeration	90–92
3		160<	140<	60<	50<	Severe	1:3	Inspiratory and expiratory wheeze, decreased aeration	<90

Figure 3



Pulmonology

– Asthma Treatment

- LTRA- Leukotriene Receptor Antagonist
- Inhaled glucocorticoids
- Inhaled bronchodilators
- Prednisone if severe
- Appropriate referrals to PCP within a week, especially children
- Referral ER
 - No response to inhaled SABA or oral glucocorticoids
 - Oxygen required to maintain normal saturation



Pulmonology-Wheezing

- All wheezes are NOT asthma
- Origin
 - Extrathoracic
 - Anaphylaxis
 - Vocal Cord Paralysis
 - Paradoxical vocal cord Motion
 - PND
 - Intrathoracic
 - Asthma
 - Bronchiectasis
 - Bronchiolitis
 - Tumor/ Masses in Chest



Pulmonology

- Symptoms
- Physical Exam
 - Location of Wheeze
 - Imaging to discern
- Treatment
- Appropriate referral



Pulmonology-Pneumonia

- Outpatient vs Inpatient
- CAP vs HCAP
- Symptoms
 - PSI
 - CURB 65
- Physical Exam Clues
- Treatment



Pulmonology

- Pneumonia-Outpatient vs Inpatient
 - CAP
 - Cough
 - Fever
 - Pleuritic Chest Pain
 - Dyspnea
 - Nausea/vomiting
 - Chills
 - Mental Status Changes
 - Sputum-purulent->bacterial
 - Sputum watery->Atypical



Pulmonology

- HCAP
 - Exposure to acute care or dialysis within 90 days
 - Hospital within one month



Pulmonology

- PSI
 - >50 yo
 - Pre existing condition
 - + Exam Findings
- CURB 65
 - BUN,RR>30,SBP <90 mmHg, DBP <60 mmHg,>65 yo, ? confusion
- Other Considerations
 - Oxygen <90% RA
 - Nursing home resident



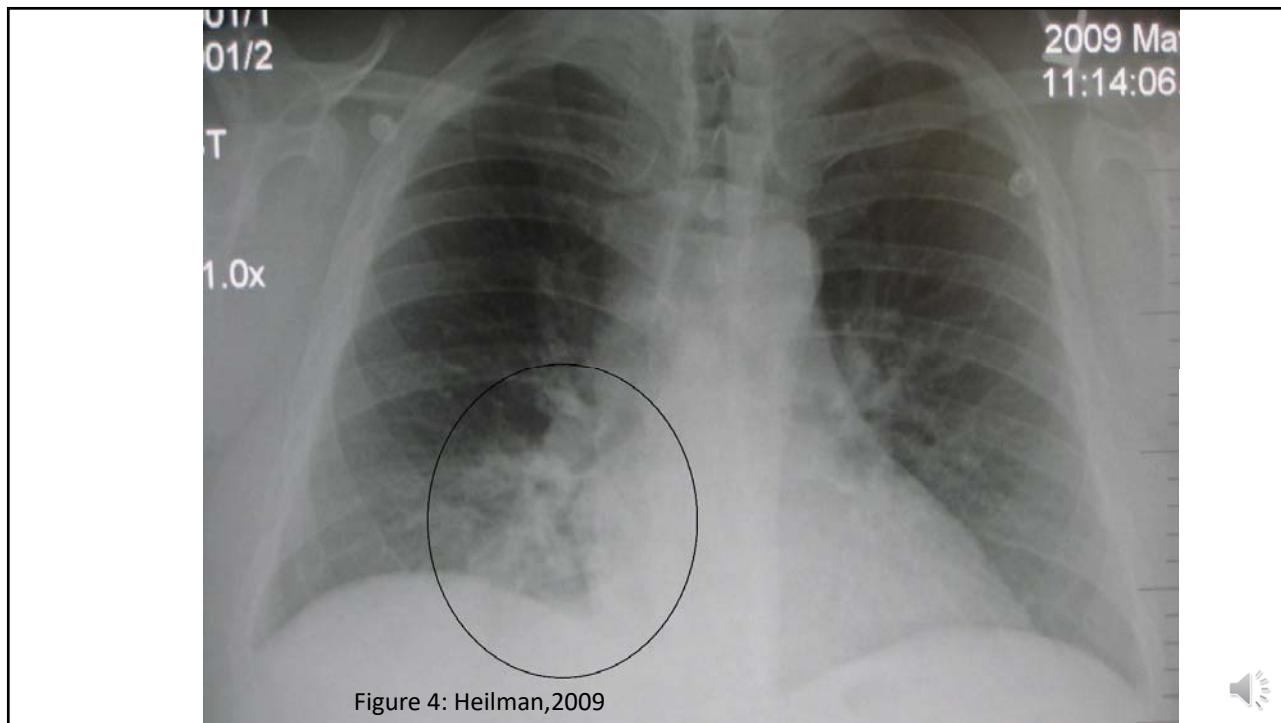
Pulmonology

- Pneumonia Diagnosis
 - Exam
 - Dyspnea
 - RR>24
 - Decreased breath sounds
 - Crackles



Pulmonology

- Chest X-ray
 - Positive
 - Confirmed diagnosis begin treatment
 - Negative
 - PE
 - Pulmonary Edema
 - Malignancy
 - Hemorrhage



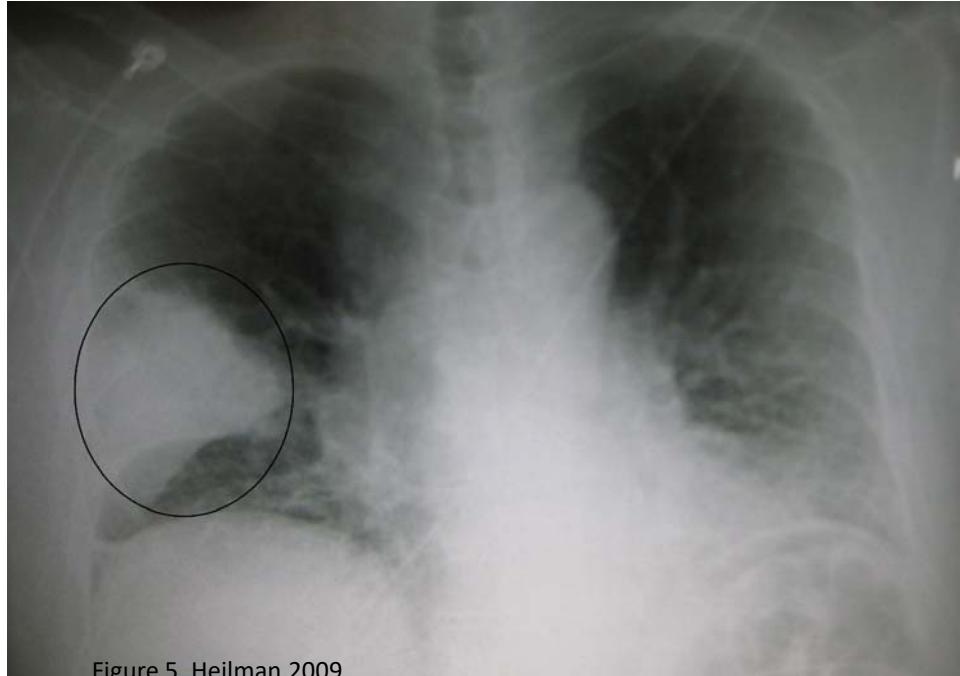


Figure 5. Heilman, 2009.



Pulmonology

- Pneumonia-Treatments-Healthy, no recent antibiotics
 - Macrolide
 - Azithromycin pack
 - Clarithromycin 500 mg bid x 5 days
 - Doxycycline 100 mg bid x7 days
- Comorbid Considerations
 - Immunocompromised, DM2, Cancer, COPD
 - Levofloxacin, Moxifloxacin, Gemifloxacin
 - Amoxicillin/Clavulanate PLUS Ceftriaxone, Cefuroxamine



Pulmonology

- Pneumonia Resolution
 - CAP resolves 3-14 days
 - Cough may persist 28 days
 - Out of work 6 days
 - Follow Up visit 2-3 days
- Follow Up Chest X-ray
 - 7-12 weeks for >40yo or smoker's
 - Not responsive to therapy



Pulmonology

- Pneumonia Vaccination
 - Do not give during active Pneumonia
 - Prevnar 13 then Pneumovax in 2 mos
 - If patient received pneumovax, wait one year before Prevnar 13



Pulmonology- Bronchitis

- Defined
 - Self limited inflammatory upper airway infection
 - 5 days of cough
 - Viral
- Symptoms
 - Typical-Afebrile, wheezing, mild dyspnea, cough
- Physical Exam
- Chest X-ray
 - Mild thickening of lower bronchioles if anything



Pulmonology

- Bronchitis Treatment Options
 - ASA, Acetaminophen, NSAIDS for pain and fever
 - Ipratropium- supported data NOT SABA
 - Antibiotics- at risk populations
 - Pertussis Risk Assessment



Pulmonology-Influenza

- Incidence
- Transmission
- Symptoms
- Physical Exam
- Testing
- Treatment
- Prevention



Pulmonology

- Incidence
 - Flu season peaks
- Transmission
 - Large particle droplets
- Symptoms
 - Abrupt Onset symptoms
 - Fever, chills, rigors
 - Myalgia's
 - Weakness/ Fatigue
 - Headache



Pulmonology

- Flu Testing
- Physical Exam
 - Vital Signs- febrile
- Treatment
 - Shortens duration of Symptoms 1-3 days
 - Decreases associated complications
 - IDSA/ CDC Guidelines for Treatment- High Risk Populations ONLY
 - Initiate treatment within 48 hrs onset symptoms
 - Oseltamivir-oral-75mg bid x 5 days, prevention/exposure 75mg daily x 10 days
 - Zanamivir- inhaled 10 mg (2 inhalations) bid x 5 days, prevention/exposure 10mg bid x 10 days



Pulmonology

- Flu
 - Prevention
 - Vaccine
 - No more live intranasal vaccines recommended by CDC
 - Recommendation based on efficacy



Pulmonary

- Completed!



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Images

- Figure 1. Cobblestone Throat. Retrieved from <http://tulamvestbe50.soup.io/since/468344804?newer=1>
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UCCC Otolaryngology (ENT)

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ENT

- Sinusitis
- Pharyngitis
- Otitis Externa
- Otitis Media
- Epistaxis
- Foreign Bodies



ENT Si

- Acute <4 weeks
- Chronic > 4 weeks
- 2 Subtypes
 - Acute Viral Rhinosinusitis
 - Acute Bacterial Rhinosinusitis

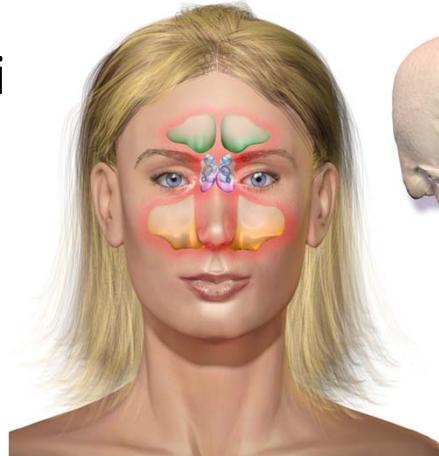


Figure 1. Blaus,2013.



ENT Sinusitis

AVRS

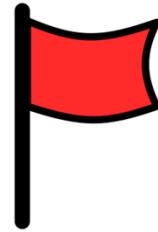
- Majority resolves spontaneously
- No fever
- Clear discharge->purulent->clear
- Improves within 10 days

ABRS

- >10days
- Purulent discharge early
- Fever
- Onset severe symptoms early
- Improves then worsens



ENT Sinusitis RED FLAGS



- High fever >102
- Periorbital Edema/Infections/ erythema
- Cranial Nerve Changes
- Abnormal EOM
- Vision Changes
- Severe Headache
- Meningeal Signs
- Changes in Mental Status



ENT

- Sinusitis Treatment AVRS
 - Antipyretics/ NSAIDS
 - Saline nasal
 - Intranasal Glucocorticoids
 - Fluticasone, mometasone
 - Decongestants- OTC
 - Antihistamines OTC
 - Mucolytics OTC



ENT Sinusitis

- Sinusitis Treatment ABRS
 - Amoxicillin/Clavulanate 500 tid or 875 bid
 - High Risk Resistance- 2 gm bid
 - Doxycycline 100 mg bid or 200 mg daily
 - Levofloxacin or moxifloxacin 500 mg daily
 - Clindamycin 150-300 mg q 6 hrs PLUS Cefixime 400 mg
 - All regimen 5-7 days
 - Systemic Steroids not recommended



ENT Pharyngitis

- Group A Streptococcus, Viral, Allergies
- Symptoms
 - Sudden onset sore throat
 - Exudate
 - Tender cervical nodes
 - Fever



ENT

- Centor Criteria NEED 3+
 - Exudate
 - Cervical Lymphadenopathy
 - Fever History
 - No cough
 - Age <15 yo Add 1
 - Age >44 yo Subtract 1



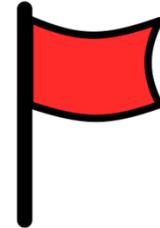
- Testing
 - RADD
 - Culture



Figure 3



ENT Pharyngitis RED FLAGS



- Peritonsillar Abscess
 - Muffled Voice, unilateral pain edema and neck pain/ jaw pain
 - Epiglottitis
 - Stridor, Drooling, fever, respiratory Distress
 - Retropharyngeal Space Infections
 - Diffuse swelling, breathing difficulties
- Beware when pain is out of proportion to exam



Figure 4. Mills, et al.2010.



ENT

- Treatment
 - PCN V 500 mg bid/tid x10 days
 - Amoxicillin 500 mg bid
 - PCN G IM 1.2mu x 1
 - Cephalexin 500 mg bid
 - Azithromycin pack
 - Clindamycin 300 mg tid
 - Clarithromycin 250 mg bid



ENT

- Viral Pharyngitis
 - RADT negative
 - Doesn't meet Centor Criteria
 - Can do culture if risk factors
 - Many causes flu, EBV



- Treatment Viral Pharyngitis
 - Lozenges
 - Throat Sprays
 - Acetaminophen/ NSAIDS
 - Glucocorticoids- SEVERE



Figure 4. Heilman,2010.



ENT Otitis Externa

- High Risk Patients
 - Swimming/water exposure
 - Trauma- cleaning
 - Hearing aids, cell phone ear piece
 - Dermatological conditions
- Symptoms
 - Pain, itching, discharge, hearing changes





Figure 5.Peter,2010.



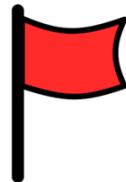
ENT

- Otitis Externa
 - Physical Exam
 - Tender tragus
 - Pinna tender with retraction
 - Otorrhea
 - Otoscopy-+air fluid levels – OM



ENT

- Otitis Externa
 - Mild-acetic acid or hydrocortisone
 - Moderate-Severe ciprofloxacin or corticosteroid x 7 days
 - No water for 7-10 days
 - **RED FLAG**
 - Malignant otitis externa
 - Increased risk if DM
 - Skin infection spreading to bone
 - Severe otalgia, otorrhea->ER



ENT

- Otitis Externa Treatment
 - Topical Antibiotics
 - Ciprofloxacin otic- 0.25ml bid
 - Hydrocortisone/Polymyxin B/neomycin- 4 drops tid
 - Glucocorticoids
 - Hydrocortisone/ Acetic Acid-3 drops qid x 24 hours then 5 drops tid
 - Dexamethasone/Ciprofloxacin- 4 drops bid
 - Acetic Acid Drops



ENT

- AOM
 - Middle ear fluid and inflammation +/- effusion
 - Physical Exam- otoscope/ pneumatoscope- TM motion, TM opacification, bulging, erythematous, poor mobility

– RED FLAG

- Complete Hearing Loss, especially after trauma
- RAMSEY HUNT- ipsilateral facial paralysis, vesicles in auditory canal, ear pain

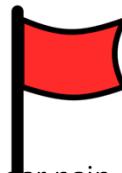


Figure 6.Worme,et.al.,2013





Figure 7, Hawke,2010.



ENT

- Otitis Media Treatment
 - Amoxicillin 500 mg bid
 - Cefdinir 300 mg bid
 - Cefuroxime 500 mg bid
 - Azithromycin pack
 - Clarithromycin 500 mg bid
 - Bactrim DS bid
- Ruptured TM –
 - Floxacin drops-Mild-acetic acid or hydrocortisone
 - Moderate-Severe ciprofloxacin or corticosteroid x 7 days
 - No water for 7-10 days



ENT Epistaxis

- ABCs
- 90% anterior and managed with pinching anterior nose at Kiesselbach's plexus
- Identify source
 - Good light
 - Suction or blow nose



ENT Epistaxis

- Epistaxis Treatment
 - Afrin
 - Silver Nitrate
 - Roll 5-10 seconds
 - LET
 - Gauze with lidocaine 4%, epinephrine 0.1%, tetracaine 0.4%
 - Nasal Packing
 - Rapid rhino- soak, place, inflate, remove 72 hours by ENT



ENT

- Epistaxis
 - Allow the patient to wait
 - No source of bleeding identified
 - REFERRAL
 - Chronic- Referral to PCP



ENT Foreign Bodies

- Otic
 - Tools
 - Suction
 - Magnet
 - Curved cerumen remover
 - Bayonet forceps
 - Alligator clamps

*Immobilize insects with mineral oil



ENT

- Foreign Bodies
 - DO NOT REMOVE
 - TM rupture
 - No visualization
 - Button batteries
 - Sharp foreign objects



ENT

- Foreign Bodies
 - Nasal
 - Topical lido
 - Same tools
 - Ethyl chloride
 - Mothers Kiss- parent



ENT

- Completed!



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UCCC Neurology

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Neurology

- Headache
- Dizziness
- Syncope
- Concussion
- Bell's Palsy
- CVA



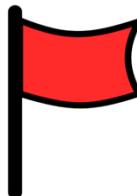
Neurology Headache

- History
 - Detailed history
 - Onset
 - Timing
 - Alleviating/ aggravating
 - Personal and Family History
 - Associated Symptoms
- Physical
 - KEYS- VS, Bruits, Neuro Exam and Funduscopic Exam



Neurology

- **RED FLAGS Headache**
 - >40 years old
 - Worst Headache of Patient's life
 - Change in Headache History
 - Neurological Changes
 - Trauma, awakens from sleep, worse with Valsalva/ exercise
 - Systemic Symptoms
 - Pregnancy(>20 weeks r/o PIH)
 - New onset Lyme, HIV or cancer



Neurology

- Headache Treatments
 - Ice packs
 - Ketorolac 30 or 60 mg IM + Dopamine Antagonist- Prochloroperazine 10 mg
 - Triptan family
 - Sumatriptan- 50 mg po x 1
 - Referral Indications
 - New Onset
 - Chronic Management
 - Danger Symptoms



Neurology Dizziness

- Dizziness
- Vertigo
- Confusion
- Lightheadedness
- Weakness
- Faint
- Unstable
- Pre syncope
- Falling
- Motion sickness
- Losing balance
- “Feeling Off”



Neurology

- Dizziness Descriptors
 - Most Common Causes
 - Detailed History
 - Onset
 - Timing
 - Alleviating/ Aggravating
 - Associated Symptoms
 - History Clues for Diagnosis
 - Seconds- BPPV
 - Minutes- Migraines, Vascular event
 - Hours-Meniere's Disease, Migraine
 - Days-post viral, vestibular neuritis



Neurology

- Dizziness Exam
 - VS
 - ENT
 - Anatomy-lesions, fluid
 - Test hearing and discrimination
 - Whisper test
 - Cervical exam
 - Neuro
 - Gait
 - Motor
 - Cerebellar



Neurology

- Maneuvers
 - Dix-Hallpike -BPPV
 - Posture and Gait
- Treatment
 - Only when neurological causes are ruled out
 - Anti-emetics- promethazine, prochlorpromazine
 - Antihistamine-meclizine, diphenhydramine, nasal corticosteroid
 - Anticholinergic-scopolamine
 - Antivirals-valacyclovir



Neurology Syncope

- Loss of consciousness 1-3% ER visits
- History-ACEP 2007
 - Precipitating Factors
 - Patient position
 - Onset- rapid vs gradual, how long did it last
 - Activity at time of LOC
 - Loss of Urine or Stool?
 - Injury? Fell to ground?
 - Spontaneous and complete recovery?
 - Witnessed?
 - Personal and Family History
 - Meds? Hydration?



Neurology

Syncope Causes

- Neurally Mediated
 - Vasovagal
 - Cough
- Orthostatic Hypotension
 - Drugs/Etoh
 - Autonomic Dysfunction
 - Volume Depletion
- Cardiac
 - Structure
 - Arrhythmia
 - MI
 - Drug Induced
- Cerebrovascular

Brignole,2007.

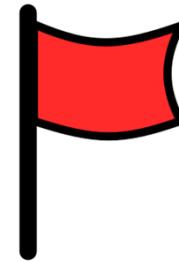


Neurology

- Physical
 - VS
 - orthostatic BPs, tachycardia, fever
 - Oral
 - tongue/buccal mucosa
 - Cardiac
 - Tachycardia
 - Irregular rhythm
 - Neurological Exam
 - EKG
 - If indicated
 - Blood glucose/Urine Pregnancy



Neurology



- **RED FLAGS -SYNCOPE**
 - Severe headache
 - Neurological changes
 - Chest Pain
 - Exertional Onset
 - Dyspnea
 - Palpitations
 - Ataxia
 - Dysarthria
 - Diplopia
 - Hypotension



Neurology

- Syncope Treatment
 - Only if no red flags present
 - Hydration
 - Eliminate precipitating factor if possible
 - Referral



Neurology Concussion

- Collision, confusion, amnesias
- Incidence up to 19% contact sports
- Symptoms
 - Variable
 - Can be immediate or delayed



Neurology

- 3 main symptoms of a concussion
 - Pt can not maintain coherent stream of thought
 - Patient had heightened distractibility
 - Patient cannot perform a sequence of goal directed movements



Neurology

- Dizziness
- Headache/Pain
- Blank expression/stare
- Confusion
- Photophobia
- Difficulty concentrating
- Vision change
- Loss of taste or smell
- Nausea or vomiting
- Tinnitus
- Emotional changes
- Memory changes
- LOC



Neurology

- Concussion Exam
 - Appearance
 - Facial Bones
 - Head and Neck
 - Neuro
 - Strength/ sensation
 - Coordination/ balance

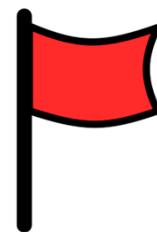


Neurology

- Concussion-Standardized Assessment
 - Orientation
 - Memory
 - Concentration
 - Delayed response
 - Neurological tests
 - Exertional tests



Neurology



- Concussion RED FLAGS
- Increase irritability/behavioral changes
- Neck Pain/headache
- Neurological changes
- Can not recognize familiar people or places
- Loss of Consciousness
- Seizures
- Drowsiness
- Nausea or Vomiting
- Speech Changes



Neurology

- Concussion Treatment
 - Mild
 - Mental Rest
 - Physical Rest
 - School ?
 - Medication
 - Concussion Prevention
 - Helmets
 - Avoidance of Risky Behavior
 - Appropriate RT Play



Neurology

- Return to Play
 - LOC- needs ER documentation
 - Concussion Diagnosis- RT play/practice when symptoms are resolved OFF medication
 - Prior Concussion- Referral to Specialist



Neurology-Bell's Palsy

- Unilateral facial paralysis LM Neuron CN VII- complete or partial
- Anatomy of CN VII
 - Motor
 - Parasympathetic
 - Afferent fibers
- Most Common Causes
 - Herpes Simplex, Herpes Zoster and Lyme Disease



Neurology

- Bell's Palsy Presentation
 - Patient CAN'T raise brow, close eyelid, move forehead, mouth drooping, decreased tearing, decreased salivation, hyperacusis or ear pain-UNILATERAL
 - Acute onset
 - Distinguishing CVA from Bell's Palsy
 - Patient CAN move forehead but had mouth droop=>CVA!! Not 100%



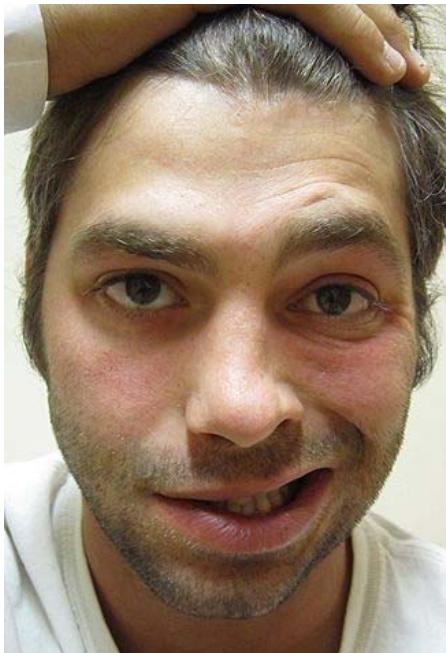


Figure 3



Figure 4



Neurology

- Bell'sPalsy Detailed History
 - Onset, duration, other symptoms, tick bite, History CVA, risk factors
- Physical Exam
 - VS
 - Complete Neurological Exam
- Treatment

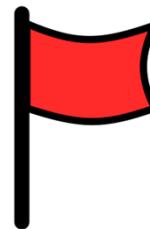


Neurology

- Bell's Palsy Treatment
 - Eye Care
 - Liquid or artificial tears q 1 hour
 - Steroids
 - Prednisone 60-80 mg/day x 7 days
 - Antivirals
 - No additional benefit except Zoster- Valacyclovir 1 gm tid x 7 days



Neurology



- **BELL'S PALSY RED FLAGS**
 - Sudden Onset
 - Neurological Symptoms
 - Unaffected forehead
 - History of tick bite
 - Ulcers/ Blisters ears/face
 - Prolonged or recurrent
 - Bilateral
 - CN VII PLUS other CN's



Neurology-Cerebrovascular Attack

- In Urgent Care- key is quick Assessment- training staff at front/ MA's
- Time <4.5 hours for thrombolysis, ideally <3 hours
- Risk Factor Identification
 - HTN, older age, Hx TIA/CVA, HX CV disease, smoking



Neurology

CVA

- Vertigo
- Ataxia
- Aphasia
- Decreased LOC
- Visual Changes
- Hemiparesis
- Monoparesis
- Dysarthria



Neurology

- CVA Physical Exam
 - VS
 - Neurological
 - Ophthalmological
 - Cardiovascular
 - Glucose



Neurology

- CVA-Neurological Detailed Exam
 - CN
 - Motor
 - Sensory
 - Cerebellar
 - Gait
 - DTRs
 - Language
 - Mental Status/ LOC



Neurology

- CVA Differential
 - Bell's Palsy
 - Brain Tumor
 - Hypoglycemia
 - Seizure
 - Syncope
 - TIA



Neurology

- Assessment
 - RAPID
 - CALL 911- Inform them you believe its CVA
 - Oxygen- only if <95% RA



Neurology

- Completed!



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UCCC Dermatology

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Dermatology

- Adult Rashes
- Animal Bites
- Abscesses
- Burns
- Wound Closure



Dermatology

- Rash Descriptors
 - Size
 - Color
 - Shape
 - Secondary Characteristics
 - Location
 - History
 - Exposure



Dermatology

Descriptors

- | | |
|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">– Papule– Macule– Nodule– Plaque– Patch | <ul style="list-style-type: none">– Pustule– Vesicle– Bullae– Burrow– Telengestasia |
|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|



Dermatology

- Color
 - Erythematous
 - Yellow
 - Pigmented
 - Hyperpigmented
 - Hypopigmented
 - Depigmented
 - Violaceous



Dermatology

- Shape/Pattern
 - Annular
 - Cluster
 - Well Circumscribed
 - Follicular
 - Dermatonal
 - Linear
 - Verrucous
 - Umbilicated
 - Confluent



Dermatology

- Secondary Characteristics
 - Scale
 - Atrophy
 - Lichenification
 - Fissuring
 - Ulceration
 - Ecchymosis



Dermatology

- Location
 - Where did it begin?
- History
 - Did it begin pruritic now painful?
- Exposure
 - Allergens, chemical, pets?
- Differential



Dermatology

- Herpes Zoster (Shingles)
 - Symptoms
 - Painful or burning, pruritic rash
 - Physical Exam
 - Fever, LAD, vesicles, erythematous patches or groups following dermatonal patterns
 - Treatment
 - Acyclovir 800 mg 5 x daily x 7 days, topical ointment
 - Valacyclovir 1gm tid x7 days
 - Prevention-vaccination
 - Communicability
 - * RED FLAG RAMSEY HUNT and OCULAR SHINGLES

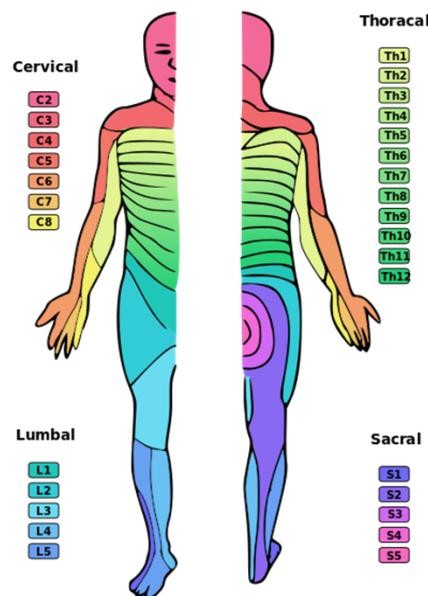


Figure 1. Stephens,2009.





Figure 2. Elizagiori, 2009.



Figure 3. Fisle,
2007.



Dermatology

- Herpes Simplex Virus
 - Symptoms
 - Painful blisters on face- MC lips or genitals
 - Physical Exam
 - Single or grouped vesicles, MC unilateral
 - Viral Swab
 - Bloodwork
 - Treatment
 - Acyclovir 400 mg tid x 7 days
 - Valacyclovir 500 mg bid x 3 days
 - Acyclovir ointment 5%





Figure 4. Hermann, 1964.



Dermatology

- Varicella
 - Varicella (chicken pox)
 - Symptoms
 - Very pruritic rash, fever
 - Physical Exam
 - Vesicles central umbilication or crusting- diffuse
 - Treatment
 - Supportive





Figure 5. Camilarazales, 2010.



Dermatology

- Tinea Infections
 - Symptoms
 - Can be asymptomatic or painful or pruritic red lesions
 - Physical Exam
 - Erythematous, scaly plaque that grows in size , KOH





Figure 6. Heilman, 2011.



Figure 7. CDC/Georg, 1964.



Figure 8. Choudhoury, et.al. 2014.





Figure 9.



Figure 10.Narang et.al, 2012.



Figure11.Oke et al., 2014.



Dermatology

– Treatment

- Corporis- ketoconazole 1% cream/shampoo/gel/foam daily or naftifine 1 or 2% cream or gel bid
- Versicolor-Selenium sulfide shampoo 1% x 2 weeks or ketoconazole 2% cream x 10 days
- Captitis- oral antifungals-griseofulvin 500 mg daily or terbinafine granules 250 mg daily x 6 weeks
- Pedis-topical azoles or allylamines (same as corporis)
- Cruris- topical azoles or allylamines(same as corporis)



Dermatology

• Onychomycosis

- Symptoms
- Physical Exam
 - Thickening, discoloration of nails
 - KOH stain +
- Treatment
 - Topical
 - Cilpirox 8% paint on nail daily
 - Oral
 - Diflucan 150 mg weekly x 3 months





Figure 12. Heilman, 2010.



Dermatology

- **Molluscum Contagiosum**
 - Symptoms
 - Papules, spreading, painless
 - Physical Exam
 - Pearly papules with central umbilication
 - Treatment
 - Spontaneous Resolution within one year
 - Surgical removal
 - Topical Preparations-Cantharadin, Imiquimod, Salicylic Acid, Retinoids
 - Systemic Medications- griseofulvin, cimetidine





Figure 13. Bray, 2011.



Dermatology

- Coxsackie Virus
 - Symptoms
 - Painful rash, sore throat, fever, headache
 - Physical Exam
 - 2-3 mm vesicles on an erythematous base, macules- palms and soles, fever, pharyngitis-oral ulcers
 - Treatment
 - Supportive
- *RED FLAG KAWASAKI DISEASE





Figure 14.
KlatschnohnAcher, 2012.



Figure 15. Midgley, 2008.



Dermatology

- Erythema Infectiosum (Parvovirus B19)
 - Symptoms
 - 3 phases
 - Fever, headache, myalgias, rhinorrhea, edema
 - Physical Exam
 - 2-4 days-slapped cheeks
 - 1-14 days-Extensor surface macular to morbilliform rash
 - Up to 3 weeks-reticulated rash
 - Treatment
 - Topical anti-pruritics
 - Oral Antihistamines



Figure 16. Kerr, 2013.



Figure 17. CDC, 1975.



Dermatology

- Pityriasis Rosea
 - Symptoms
 - Rash on back, pruritic
 - Physical Exam
 - Herald Patch
 - Enlarging patches, can be scaly
 - Treatment
 - Topical Steroids
 - Oral Antihistamines



Figure 18. Heilman, 2011.



Figure 19. Heilman, 2011.



Dermatology

- Intertrigo
 - Symptoms
 - Itching, redness and pain in skin folds
 - Risk factors
 - Physical Exam
 - Erythematous, weepy rash, sometimes white discharge in intertriginous areas
 - Treatment
 - Wound Care
 - Antifungals
 - Topical Steroids



Figure 20. Sadana et al., 2014.



Dermatology

- Cellulitis
 - Symptoms
 - Red, painful swollen area, many etiologies
 - Physical Exam
 - Erythematous, warm area, sometimes visible pustule or puncture
 - Treatment- 2014 IDSA Guidelines
 - Mild Non Purulent Infections
 - PCN 500 mg bid
 - Dicloxicillin 250 mg qid
 - Cephalexin 500 mg qid
 - Clindamycin 300 mg qid
 - Moderate
 - IV Antibiotics



Figure 21.



Dermatology

- Cellulitis- IDSA Guidelines 2014
 - Purulent Cellulitis
 - Mild
 - I &D
 - Moderate
 - I &D
 - C &S
 - Empiric Therapy
 - » TMP/SMZ DS bid
 - » Doxycycline 100 mg bid
 - Severe
 - Referral



Dermatology

- Paronychia
 - Symptoms
 - Pain and redness, possibly after trauma
 - Physical Exam
 - Erythematous, edematous area, possible pustule
 - Treatment
 - I &D
 - Antibiotics
 - Amoxicillin/ Clavulanate 500-875 mg bid x 7 days
 - Clindamycin 300 mg qid x 7 days





Figure 22. Craig, 2007.



Dermatology

- Impetigo
 - Symptoms
 - Pruritus, blisters
 - Physical Exam
 - Crusting or weepy vesicles, typically perioral, LAD
 - Treatment
 - Topical Antibiotics
 - Mupirocin 2% tid x 5 days
 - Retapmulan 1% bid x 7 days





Figure 23. Peter, 2012.



Dermatology

- Impetigo
 - Systemic Antibiotics
 - Dicloxacillin 250 mg qid
 - Cephalexin 250 mg qid
 - Clindamycin 300 mg qid
 - Amoxicillin 875 mg/Clavulanate 125 mg bid



Dermatology

- Erysipelas
 - Symptoms
 - Pruritic or painful rash
 - Physical Exam
 - Erythematous rash, well defined borders, tender
 - Treatment
 - Comfort measure- cool compress
 - NSAIDS, acetaminophen
 - Penicillin 500 mg bid x 10+ days
 - Clindamycin 300 mg qid



Figure 24. Werk, 2009.



Figure 25. CDC/Sellers, 1964.



Dermatology

- Folliculitis
 - Symptoms
 - Erythematous lesions diffuse scattered over one or more areas, intense pruritus
 - Physical Exam
 - Inflammation and erythema at hair follicle, some pustular
 - Treatment
 - Topical-Mupirocin or clindamycin
 - Oral- Dicloxacillin 500 mg qid or cephalaxin 500 mg qid
 - Hot Tub Folliculitis- Ciprofloxacin 500 mg bid



Figure 26. Heilman,
2013.



Dermatology

- Warts- Verruca Vulgaris
 - Symptoms
 - Painless growths over time
 - Physical Exam
 - Hyperkeratotic papules or plaques, irregular pattern
 - Treatment
 - Electrodesiccation
 - BCA/TCA
 - Imiquimod
 - Cryosurgery
 - Curettage
 - Cantharadin



Figure 27. Marionette, 2009.



Dermatology

- Animal and Human Bites
 - Symptoms
 - Decipher animal, Vaccination History
 - Physical Exam
 - Determine depth, document size, muscle, tendon and Neurovascular involvement, ROM
 - Treatment
 - Anesthetize if necessary
 - Irrigate 100-200 ml
 - Debride
 - X-ray



Derm

- Animal Bites
 - Treatment- Cont'd
 - Tetanus prophylaxis
 - Rabies prophylaxis?
 - Report to Department of Health



Figure 28. Nicor, 2008.



Dermatology

- Animal Bites
 - Amoxicillin 875 mg/Clavulante 125 mg bid
 - Doxycycline 100 mg bid PLUS Clindamycin 300 mg tid
 - Ciprofloxacin 500 mg bid PLUS Clindamycin or Metronidazole 500 bid
- Human Bites
 - Amoxicillin 875 mg /Clavulanate 125mg bid
 - Doxycycline 100 mg bid



Dermatology

- Burns
 - ABCs
 - Determine degree- thickness
 - 1st degree- Superficial
 - Dry, red, blanches with pressure
 - 2nd Degree-Superficial Partial Thickness
 - Blister, moist red, blanches with pressure
 - 3rd Degree- Superficial Full Thickness
 - Black, blister, pasty-no pain
 - 4th Degree- Full Thickness
 - Waxy, leather, white, charred, no pain only pressure



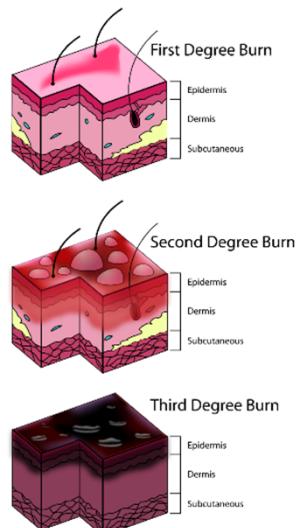


Figure 29. Aainsqatsi, 2007.



Figure 31. Kronoman, 2008.



Figure 30. Quinn, 2007.



Figure 32. Snickerdo, 2006.



Figure 33. Westchaser, 2008.



Figure 34. 3rd degree burn.





Figure 35.

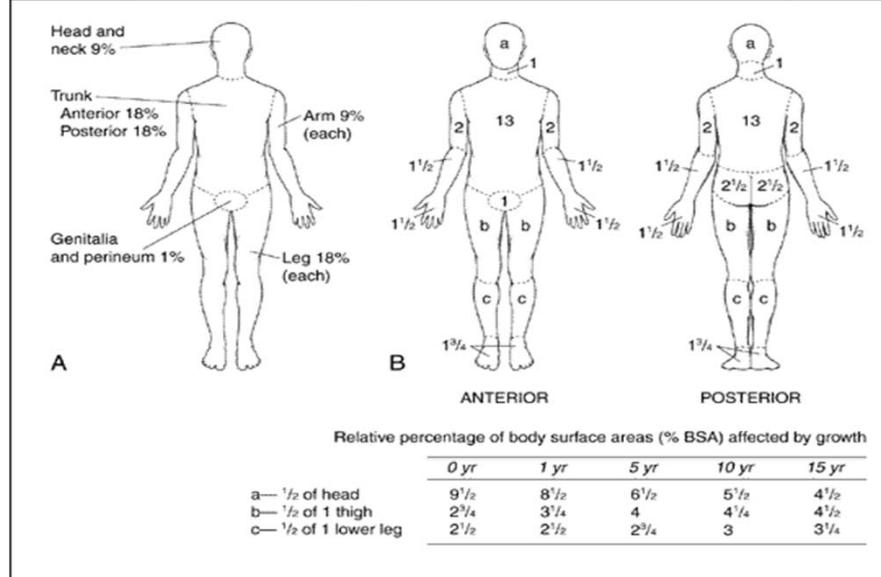


Dermatology

- Burns- Cont'd
 - Determine Body Percentage Covered by Burn
 - Rule of 9's
 - Lund and Browder Scale



Estimating Percent Total Body Surface Area in Children Affected by Burns



(A) Rule of "nines"

(B) Lund-Browder diagram for estimating extent of burns



Figure 36. US Health and Human Services, 1969

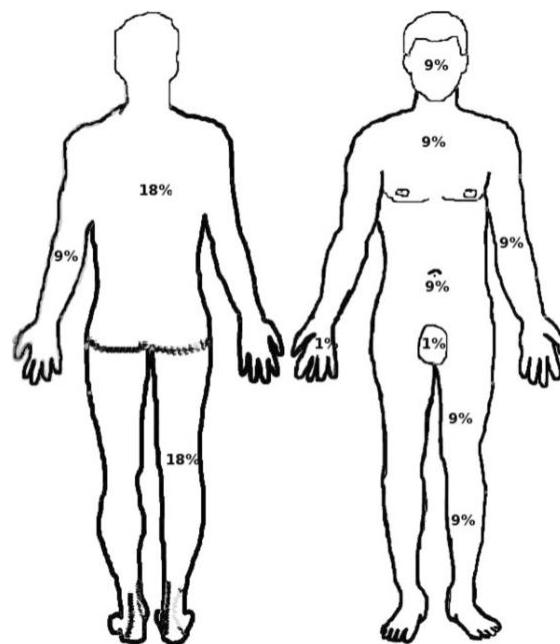


Figure 37. Alhabri, et.al., 2012.



Dermatology

- Burns
 - Transfer Indications
 - Inhalation
 - Abuse
 - Depth >3cm
 - 2nd or 3rd degree > 20% TBSA or 10% TBSA if <10yo
 - 3rd degree >5% TBSA
 - Chemical
 - Electrical
 - Trauma AND burn



Dermatology

- Burns
 - Treatment
 - Debride- clothing ,particulate matter, necrotic skin
 - Cool
 - Wound Care
 - Allograft, Hydrocolloid, impregnated gauze, semipermeable membranes
 - Cover
 - Reassess 24 hours



Dermatology

- Abscess
 - Incision and drainage
 - <5mm conservative management
 - Assess Location, size and estimated depth- ? Referral
 - I & D
 - Obtain and document informed consent
 - Anesthetize
 - Clean Site



Dermatology

- Wide Incision
- Drain and Culture
- Explore
- Pack
- Sterile Dressing
- Antibiotic Prophylaxis





Figure 38. Mittag et.al, 2016.



Figure 39. Tanaka et.al., 2016



Dermatology

- Toxicodendron Dermatitis
 - Poison Ivy
 - Symptoms
 - Physical Exam
 - Treatment
 - Topical Steroids
 - Anti pruritics
 - Calamine/ Aveeno
 - Oral Steroids- prolonged taper
 - Prednisone 10 mg tablets-4 tablets x 4 days, 3 tablets x 4 days, 2 tablets x 4 days and 1 tablet x 4 days





Figure 40.



Figure 41. Larsonja, 2009.



Dermatology

- Wound closure
 - Assess the wound
 - Is it >2cm ?
 - Consider using adhesives if <2cm
 - Is it a result of an animal bite or human bite?
 - When did the wound occur 6- 12 hours ago?
 - Depth? Is there any nerve, tendon or muscular involvement?
 - Is there any reason to refer to surgery?
 - Deep Wounds or Unknown Depth
 - Cosmetic Issues
 - Involvement of tendons, nerves, vessels or bone
 - Severely Contaminated Wounds
 - Severe Crush Injuries

Forsch,2008.



Dermatology

- Irrigate with tap water
- Clean gloves
- Anesthetize
 - EMLA for children
 - 1% lidocaine for anesthesia
 - Use epinephrine for vasoconstriction except on digits, and end organs
- Suture
- Staple
- Glue



Dermatology

- Suture
 - Absorbable versus Non absorbable
 - Learn 2 techniques well for knot tying
- Staples
 - Scalp
- Glue
 - Great for children
 - No follow up required



Dermatology

- Wound Care
 - Antibiotic Ointment versus Vaseline
 - Vaseline
 - Follow Up
 - Suture Removal
 - Face/Ear- 5 days
 - Scalp- 6 days
 - Arm/leg/Hand/Chest/Abdomen- 10 days
 - Foot- 14 days
 - Staple Removal
 - 7 days
 - Glue
 - Tetanus Prophylaxis



Dermatology

- Completed!



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UCCC Psychiatry

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Psychiatry

- Anxiety
- Depression
- Violent Patient
- Reporting laws
 - Children
 - Elderly
 - Domestic Violence



Psychiatry -Anxiety

- Anxiety recognizing common symptoms
- Repeated behaviors
- Ruling out pathology



Psychiatry

- Anxiety Treatment
 - New Onset
 - Alternative Options
 - Non Benzodiazepine
 - Busprione 10 mg slow onset
 - Hydroxyzine 25-50mg,good for insomnia and anxiety
 - Benzodiazepines
 - Alprazolam
 - Diazepam
 - SSRI
 - SNRI
 - Previously Diagnosed
 - Refill



Psychiatry

- Anxiety
 - SSRI
 - Paroxetine-Start at 10-20 mg daily
 - Sertraline-Start at 10 mg daily and increase
 - Citalopram-Start 10 mg daily and increase
 - Escitalopram-Start 5-10 mg and increase
 - SNRI
 - Venlafaxine-Start 37.5 mg daily
 - Duloxetine-Start 30-60 mg daily



Psychiatry-Depression

- Quick Screening
- Many reasons to come to Urgent Care
 - Privacy
 - Quick Service
 - Stigma
- Rule out Suicidal ideation/ Homicidal Ideation
 - Know your local resources



Psychiatry

- Depression
 - Screening
 - DSM V Criteria
 - Short Term Medical Trial
 - SSRI
 - SNRI
 - Conflicting Data
 - Reliable Follow Up?



Psychiatry-Anxiety/ Depression

Goal-Immediate Referral versus Short Term Follow Up

Are they causing harm to themselves or others?

Know your local resources- outpatient and inpatient



Psychiatry-Violent Patient

- Clues to escalation
- Trusting Gut instincts
- Knowing how to get help
- Panic Button



Psychiatry

- **Clues to Escalation**
 - History of Violence
 - Verbal threats, Loud ,Angry or aggressive speech
 - Physical agitation- pacing, squirming, fist clenching, wall punching
 - Provocative behavior
 - Actual Violence Occurring



Psychiatry

- Violent Patient
 - Do not hesitate to get out and get help
 - Never allow patient to position themselves between you and exit



Psychiatry

- Reporting
 - Mandated Reporters for Suspected
 - Elder Abuse
 - Child Abuse/ Neglect-All 50 States
 - Sexual Assault
 - Abuse of Vulnerable Persons
 - Gunshot Wounds



Psychiatry

- Complete!



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UCCC Pediatrics



- Dermatology
- Orthopedic Injuries
- Sports Physicals
- Otolaryngology (ENT)



Pediatric Dermatology

- Deciphering Pediatric Rashes
 - Step by Step Approach
 - Determine if the child is ill or well?
 - Is there evidence of systemic illness?
 - Look at the Mucous Membranes
 - Look for the horses
 - Discuss the possibilities with the family

Fox, 2015.



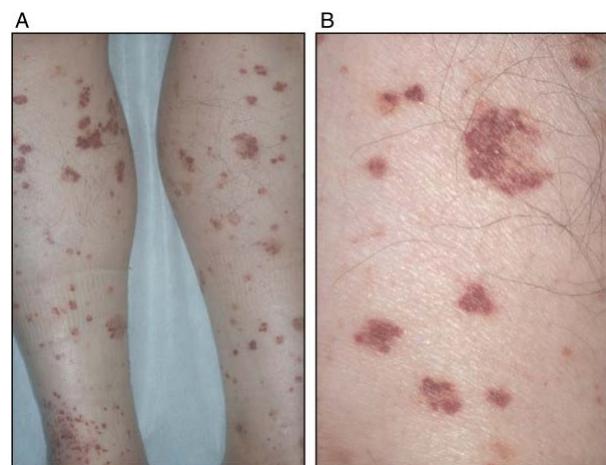
Pediatric Dermatology

- Sick or III?
- Systemic Symptoms with Pediatric Rashes
 - Petechial
 - Purpura
 - Vesicles
 - Bullae
 - Target lesions
 - Urticaria
 - Desquamation





Figure 1.Takeuchi, et al.,2013.



• Figure 2. Oshikata et al.,2013.



Figure



Figure 3. Stefab, 2009.



Figure 4. US Government, 1975.





Figure 5. Vierucci, et.al,2013.



Figure 6.Kanani et al.,2011.



Figure 7. Yasmin,2008.





Figure 8. Camilarazales,2010.



Pediatric Dermatology

- Common Pediatric Rashes
 - Coxsackie
 - Erythema Infectiosum (Parvovirus)
 - Molluscum Contagiosum
 - Atopic Dermatitis
 - Contact Dermatitis
 - Scabies
 - Intertrigo
 - Tinea
 - Pityriasis Rosea
 - Impetigo



Pediatric Dermatology

- Treat Appropriately
- Discuss Differential with family
- Follow Up with pediatrician or dermatology



Pediatric- Orthopedics

- Orthopedics
 - Nursemaid's Elbow
 - FOOSH
 - SCFE
 - Legg-CalvePerthe
 - Osgood Schlatter Disease
 - Osteochondritis Dissecans



Pediatric- Orthopedics

- Radial Head Subluxation(Nursemaid's Elbow)
 - Symptoms
 - Child with arm pain after injury (swinging between 2 adults)
 - Physical
 - Arm pulled towards body, elbow flexed and forearm pronated
 - Treatment
 - Supination/ Flexion
 - Hyperpronation



Pediatric- Orthopedics

- SCFE-Slipped Capital Femoral Epiphysis
 - Disorder where femoral physis slips during rapid growth
 - Symptoms
 - Pain with activity in anterior thigh, groin and knee
 - Physical Exam
 - Fixed external rotation
 - Muscle atrophy can occur
 - X-ray-AP/Frog- ice cream falling off cone
 - Treatment
 - Orthopedic referral urgently





Figure 9. Bowden & Klingele, 2009.

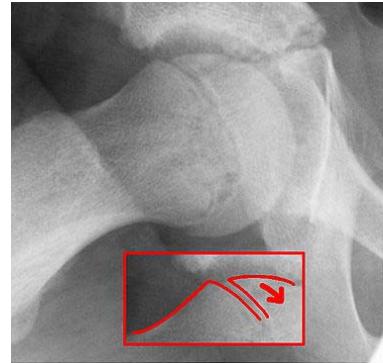


Figure 10. Lengerke, 2009



Pediatric- Orthopedics

- Legg-Calve-Perthes Disease
 - Idiopathic osteonecrosis of the femoral head
 - Symptoms
 - Limb pain worse with activity
 - Achy groin
 - Physical Exam
 - Decreased abduction of the hip
 - X-ray-AP/Frog-increased density femoral neck, crescent sign if fractured
 - Treatment
 - Orthopedic referral- monitoring/ possible surgery



Figure 11. Heilman, 2015.



Pediatric- Orthopedics

- Osgood Schlatter
 - Rapidly growing adolescent
 - Symptoms
 - Pain at tibial tubercle, exacerbated by running, jumping, kneeling
 - Physical Exam
 - Pain and tenderness at tibial tubercle
 - X-ray- spaces of heterotrophic ossification at tibial tubercle
 - Treatment
 - Activity modification, strength training, ice, PT



Figure 12. Heilman, 2011.



Pediatric- Orthopedics

- Osteochondritis Dissecans
 - Symptoms
 - Gradual onset knee pain and swelling with sports
 - Physical Exam
 - Pain, effusion, +Wilson's test
 - X-ray or MRI
 - Treatment
 - Activity changes, bracing
 - Orthopedic consult



Pediatric Sports Physicals

- School Age child
- 6 weeks prior to sport beginning
- Ideally should have medical records, vaccines
- Parents/Patient History should be reviewed before exam
 - Asthma, Allergies
 - Sports related Injuries- fractures, dislocations, concussions
 - Symptoms- SOB, Dizziness, fainting, collapse with sports
 - Family History- cardiac or sports related injuries or deaths



Pediatric Sports Physicals

- History
 - Medical Conditions
 - Medications
 - Surgeries
 - Hospitalizations
 - Family History Sudden Cardiac Death
 - Vision- contacts/ glasses?
 - Safety Questions



Pediatric Sports Physicals

- Exam Components
 - VS- BP,HR
 - Vision/ Ophthalmological
 - Skin
 - GU
 - Cardio
 - Pulmonary
 - Abdomen
 - Extremities
 - Neuro
 - MS



Otolaryngology Pediatric

- Otitis Media
- Otitis Externa
- Pharyngitis



Otolaryngology Pediatric

- Otitis Media
 - 2013 AAP Statement
 - Diagnosis
 - Moderate to Severe TM bulging OR
 - New onset otorrhea (without Otitis externa) OR
 - Mildly bulging TM PLUS recent onset of ear pain (48 hours)OR
 - Intense TM erythema
 - Treatment
 - 6-23 months old- Antibiotics
 - >24 months- can observe



Otolaryngology Pediatric

– Antibiotic Regimens

- Amoxicillin 80-90 mg/kg/d in 2 divided doses
 - <24 mos -> 10 days for mild- moderate AOM
 - 2-5 year olds-> 7 days
 - 6 year olds+ -> 5-7days
- Amoxicillin(90 mg/kg/d)/ Clavulanate(6.4 mg/kg/d)
- Cefdinir 14 mg/kg/d
- Cefuroxime 30 mg/kg/d in 2 divided doses
- After initial treatment failure
 - Amoxicillin (90 mg/kg/d)/ Clavulanate (6.4 mg/kg/d)
 - Ceftriaxone 50mg IM or IV x 3 days



Otolaryngology Pediatric

• Otitis Externa

– Symptoms

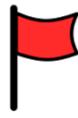
- Fever, hearing loss, discharge, pain

– Physical Exam

- Pain at tragus
- Pain with traction to pinna

– Red Flags

- Foreign body
- Necrotizing
- Cranial Nerve Involvement



Otolaryngology Pediatric

- Otitis Externa
 - Treatment
 - Antibiotic drops
 - Ciprofloxacin 0.2% -0.25ml into ear twice daily x 7 days
 - Ofloxacin 0.3%- 0.25 ml into ear daily x 7 days
 - Ciprofloxacin/ Dexamethasone- 4 drops twice daily x 7 days
 - Hydrocortisone/neomycin/polymyxin B -3 drops 3 times daily x 7 days
 - Ventilation tube or Perforation- Ciprofloxacin 0.2%
 - Instruct patient on use of drops
 - Reassess in 48-72 hours



Otolaryngology Pediatric

- Pharyngitis
 - Concern- treatment of Group A Streptococcus
 - Symptoms
 - Sudden onset sore throat
 - Exudate
 - Tender cervical nodes
 - Fever
 - Abdominal Pain
 - Headache



Otolaryngology Pediatric

- Centor Criteria NEED 3+
 - Exudate
 - Cervical Lymphadenopathy
 - Fever History
 - No cough
 - Age <15 yo Add 1
 - Age >44 yo Subtract 1



Otolaryngology Pediatric

- Treatment
 - Amoxicillin 50mg/kg/d once x 10 days (not more than 1gm daily)
 - PCN 250 mg bid-tid x 10 days
 - Azithromycin (>2 yo) 12 mg/kg/d once daily x 5 days (not more than 500 mg/d)



Otolaryngology Pediatric

- Viral Pharyngitis
 - RADT negative
 - Doesn't meet Centor
 - Can do culture if risk factors
 - Many causes flu, EBV



Otolaryngology

- Treatment Viral Pharyngitis
 - Lozenges
 - Throat Sprays
 - Acetaminophen/ NSAIDS
 - Glucocorticoids- SEVERE

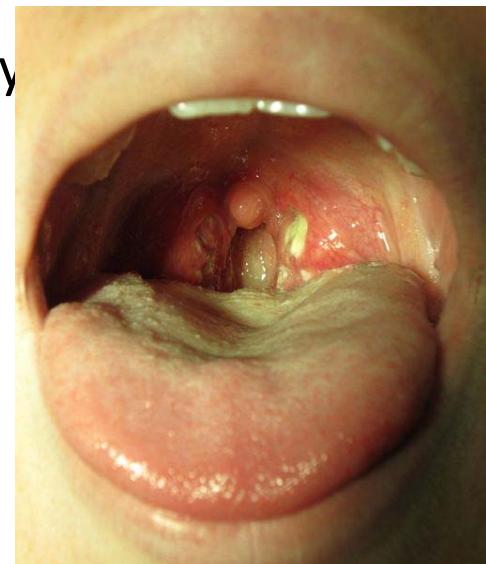
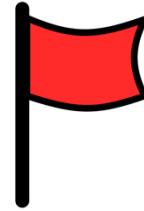


Figure 14. Heilman,2010.



Otolaryngology Pediatric



- **RED FLAGS**

- Peritonsillar Abscess
 - Muffled Voice, unilateral pain edema and Neck pain/ jaw pain
 - Epiglottitis
 - Stridor, Drooling, fever, respiratory distress
 - Retropharyngeal Space Infections
 - Diffuse swelling, breathing difficulties
- Beware when pain is out of proportion to exam



Pediatrics

- Completed!



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UCCC Orthopedics

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Orthopedics

- Neck/Thoracic/ Lumbar
- Shoulder
- Elbow
- Wrist
- Hand
- Hip
- Knee
- Ankle
- Foot



Orthopedics-Neck a

- Neck and Back Pain
 - Overview
 - Most Common Injuries
 - Cervical
 - Thoracic
 - Lumbar

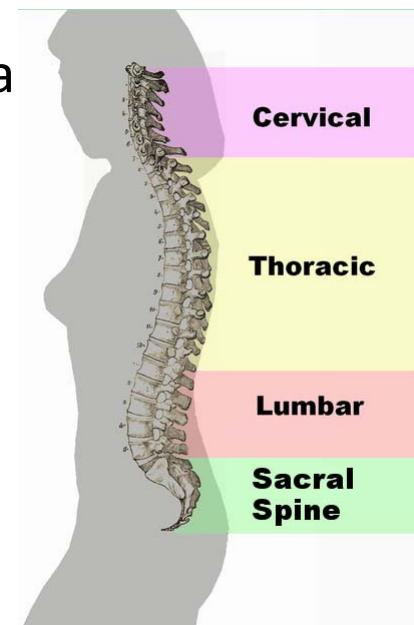


Figure 1



Orthopedics

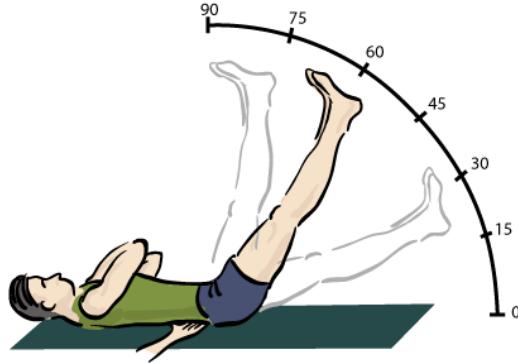
- Neck/ Thoracic /Lumbar
 - History
 - Physical
 - Always document Range of Motion, Strength and Reflexes
 - Lumbar- Document bowel and bladder changes and weakness
 - Inspection
 - Palpation- document!!
 - Spurling Test
 - Downward force on tilted head-> herniation or spondylosis
 - Straight Leg Raise
 - L5/ S1 tension





Spurling's Test

Figure 2. Jo et.al.,2012.

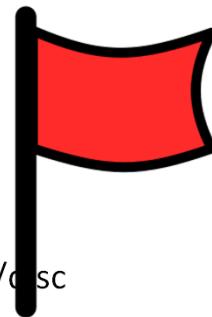


Straight Leg Raise

Figure 3.



Orthopedics



- **RED FLAGS- Neck and Back**

- Night time pain and weight loss->malignancy
- Systemic Symptoms- fever/ chills-> infection of bone/disc
- Acute bony tenderness->Fracture
- Morning stiffness >30min, younger patient->rheumatological conditions
- Neurological deficits->Nerve root compromise
- Bowel/ bladder changes and weakness->cauda equina syndrome
- +Clonus->demyelinating disease



Orthopedics

- Neck and Back-Muscular Injury
 - Symptoms
 - Pain in specific area of back or neck after activity, now repeating activity is uncomfortable, “stiff”
 - Physical Exam
 - Tenderness to palpation over muscle or group, pain with motion, ropiness
 - Range of motion and reflexes are normal
 - Treatment
 - Ice, Heat, Rest (not bedrest), gentle stretching
 - Osteopathic Manipulative Treatment
 - NSAIDs, Acetaminophen, muscle relaxers, other pain medicines



Orthopedics

- Herniation of Disk
 - Symptoms
 - Unilateral leg pain
 - Low Back pain
 - Physical Exam
 - X-ray- vertebral alignment and disk space, then MRI
 - Treatment
 - NSAIDs, muscle relaxers +/- pain medications or steroids
 - Physical Therapy, Epidural, Surgery (Discectomy)



Orthopedics

- Lumbar Stenosis
 - Symptoms
 - Radicular pain +/- back pain
 - Begins after trauma-> progresses
 - Pain with extension -> cannot walk
 - Prolonged standing/ walking-> weakness in legs
 - Diagnosis
 - X-ray Lumbar Spine, AP and Lateral, but mainly MRI Lumbar Spine
 - Treatment
 - NSAIDS, Corticosteroid Injections
 - Physical Therapy
 - Surgical decompression



Orthopedics

- Degenerative Joint Disease
 - Symptoms
 - Recurrent episodes of Low Back Pain with radiation to buttocks
 - Physical
 - X-ray AP/ Lateral- vacuum sign
 - Treatment
 - NSAIDS, weight reduction, core strength exercises
 - Osteopathic Manipulative Treatment
 - Referral Pain Management



Vacuum Sign



Figure 5. Lin,et al.,2014



Orthopedics

- Differential DJD
 - Lateral Femoral Cutaneous Nerve
 - Spinal Stenosis

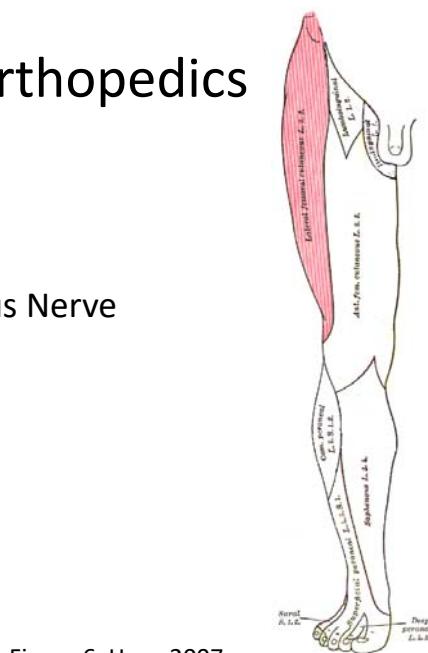


Figure 6 .Hoey,2007.



Orthopedics Shoulder

- Most Common- Rotator Cuff Injury
 - Rule Out Life threatening causes
 - Symptoms
 - Pain with movement
 - Instability
 - Loss of function
 - Clues for Diagnosis
- Trauma
 - X-ray

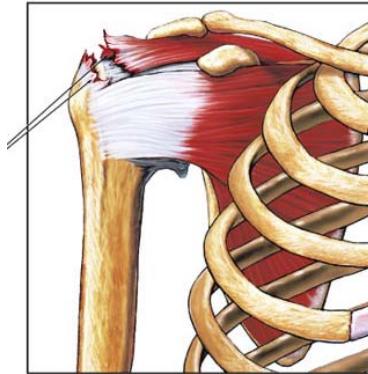


Figure 7. Nucleus Communications, 2002.



Orthopedics Shoulder

- Supraspinatus/infraspinatus Atrophy-> Rotator Cuff tear chronic
- Acromioclavicular tenderness->Acromioclavicular sprain or Acromioclavicular arthritis
- Range of motion decreased-> Rotator Cuff tear
- Hawkins Impingement + -> Rotator Cuff Injury
- Drop Arm + -> Rotator Cuff tear
- Empty Can +-> Supraspinatus



Orthopedics Shoulder

- Lift Off+>Subscapularis
- External Rotator strength decrease->Infraspinatus
- Cross Body -> Acromioclavicular joint
- Apprehension/ relocation->Glenohumeral instability



Hawkins Test
Figure 8 . Jo et.al,
2012.



Drop Arm Test
Figure 9.Mattiassich,et.al.2013.





Lift Off Test

Figure 10. Moon,2012.



Empty Can Test

Figure 11. Moon,2012.



Apprehension Test

Figure 12 Moon, 2012.



Cross Body Test

Figure 13.



Orthopedics

- X-ray Findings Shoulder
 - Adhesive Capsulitis/ Glenohumeral instability-> normal
 - Acromioclavicular Osteoarthritis-> See osteoarthritis at Acromioclavicular joint
 - Glenohumeral Osteoarthritis-> narrowing joint space
 - Rotator Cuff->humeral head sclerosis, loss of Acromioclavicular-humeral space



(a)



(b)

Figure 14. Chillemi and Franscheshini, 2013.



Orthopedics

- Shoulder Treatment
 - Reducing activity
 - Durable Medical Equipment-Severe pain- sling
 - Pain Management
 - NSAIDS, acetaminophen, Physical Therapy, Corticosteroid injections(fluoroscopic)
 - Referral
 - Orthopedics



Orthopedics Elbow

- Most Common Conditions
 - Lateral Epicondylitis
 - Medial Epicondylitis
 - Olecranon Bursitis



Orthopedics

- Lateral Epicondylitis
 - Symptoms
 - Pain with activity-wrist extensors
 - Elbow pain
 - Physical Exam
 - Pain at lateral epicondyle, muscle surrounding
 - Pain aggravated by gripping, wrist extension and radial deviation
 - Full Range of Motion, Strength, Reflexes

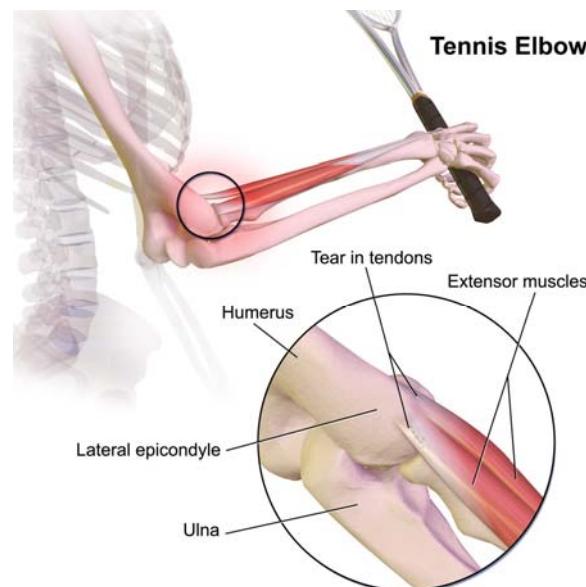


Figure 15.Blaus, 2015.



Orthopedics

- Medial Epicondylitis
 - Symptoms
 - Pain medial elbow
 - Ulnar pain- cubital tunnel
 - Sensory changes in the hand
 - Physical Exam
 - Neuropathy ulnar distribution- 4th and 5th digit, Full range of motion
 - Pain with resisted wrist flexion
 - Pain with gripping, ulnar deviation
 - Pain over medial epicondyle



Orthopedics

- Treatment
 - Lateral and Medial Epicondylitis
 - Brace
 - Splints
 - Rest, Ice
 - Discontinue Inciting Activity
 - Physical Therapy
 - Medication
 - NSAIDS, Acetaminophen
 - Injections
 - Long term outcomes worse



Orthopedics

- Olecranon Bursitis
 - Symptoms
 - Swelling and pain
 - Sometimes traumatic
 - Repetitive injury or motion (occupational)
 - Exam
 - ROM decreased- effusion
 - Olecranon area- mild- severe- effusion
 - Warmth, erythema



Figure 16.



Orthopedics

- Treatment
 - Joint Protection
 - NSAIDS
 - Fluid Aspiration
 - Referral – ligament, nerve injury



Orthopedics

• RED FLAG ELBOW

- Distal bicep tendon rupture
 - Symptoms- swelling, pain in elbow
 - Physical- edema, ecchymosis at antecubital
 - Deep pain with lifting
 - Tenderness over radial tubercle
 - Pain with resisted flexion and supination

– IMMEDIATE ORTHO REFERRAL



Figure17.Heilman,2010.



Orthopedics Wrist

- Carpal Tunnel Syndrome
- FOOSH- Fall On OutStretched Hand
 - Ligamentous Injury
 - Fracture



Orthopedics

- Carpal Tunnel Syndrome
 - Medial Nerve Injury
 - Symptoms
 - Night awakening- paresthesias to thumb, 2nd and 3rd digits
 - Pain in hand
 - Physical
 - Tinel+, Phalen +, thenar atrophy, strength
 - Treatment
 - Neutral Splinting, Injections, referral



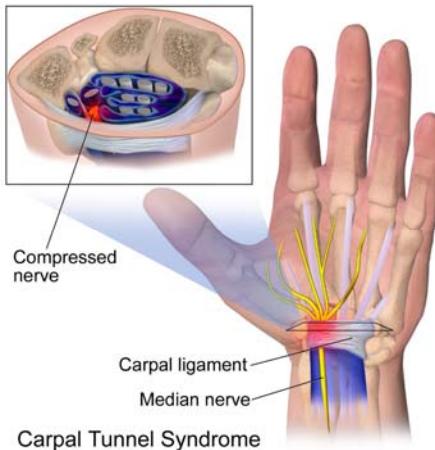


Figure 18. Blaus,2014.

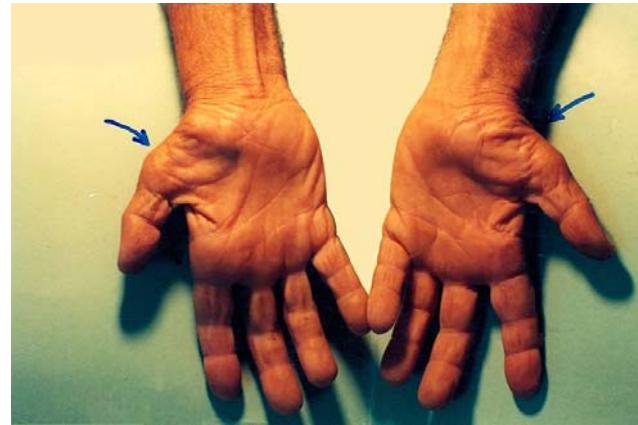


Figure 19. Gouvas,2010.



Tinel Sign

Phalen Sign

Figure 20.Bell,2016.

Figure 21. Eduspine,2015



Orthopedics

- FOOSH
 - Most Common- Distal Radius Fractures
 - Colles- dorsal displacement
 - Silver Fork Deformity- dorsally angled and displaced
 - Smith's Fracture-Younger patients, volar displacement
 - Treatment-Sugar tong splint with 90 elbow extension to MCP
 - Neurovascular Compromise-Immediate Referral Closed Reduction
- **RED FLAG**-Barton's Fracture
 - Distal radius sheared off- immediate referral



Figure 22. Asish,2010.



Figure 23. Etouffe,2011.





Figure 24. Wong, et. al.,2015.



Orthopedics

- FOOSH
 - Carpal tunnel ligamentous Injury
 - Scaphoid or lunate dislocation/ disruption
 - X-ray
 - Shuck Test
 - Treatment-Sugar tong splint or thumb spica, RICE
 - Orthopedic Follow Up 48 hours



Orthopedics

- FOOSH
 - Fracture Carpal Bones
 - Scaphoid visible X-ray
 - Thumb spica AND sling, RICE
 - Orthopedic Follow Up 48-72 hours
 - * **RED FLAG** –Orthopedic Referral if tenderness over snuff box



Figure 25.



Figure 26. Hellerhoff, 2010.



Orthopedics

- Ganglion Cysts
 - Typical Locations
 - 70% dorsal wrist
 - 20% volar wrist
 - 10% 2nd digit

AAFP



Figure
27.

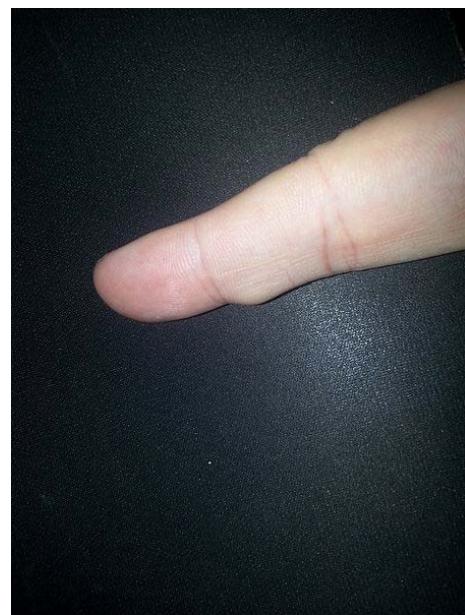


Figure 28.



Orthopedics

- Ganglion Cyst
 - Symptoms
 - Painful or painless bump
 - Physical Exam
 - Firm, Well defined, rubbery, fluid filled sac , + transillumination
 - Treatment
 - Observation, splinting
 - Aspiration
 - Surgical excision



Orthopedics

- De Quervain's Tenosynovitis
 - Symptoms
 - Swelling and tenderness in hand/wrist, repetitive motion
 - Physical Exam
 - Edema and pain over Abductor pollicis longus and extensor pollicus
 - +Finkelstein's test
 - Treatment
 - Discontinue or modify activity
 - Thumb Spica, NSAIDS, injection or surgery

Elliott,1952.



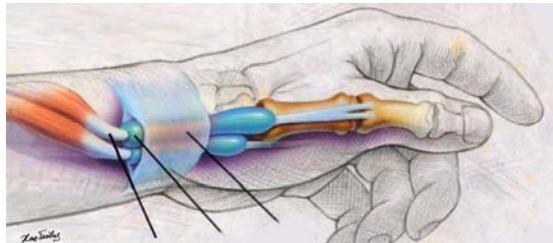


Figure 29. Gouva,2013.



Finkelstein's Test
Figure 30 . Elliott,2009.



Orthopedics Hand

- Hand
 - Ulnar Collateral Ligament Tear
 - Jersey Finger
 - Boutonniere Deformity
 - Mallet finger
 - Trigger finger
 - Metacarpal fracture



Orthopedics

- Ulnar Collateral Ligament Tear
 - Fall onto abducted thumb
 - Symptoms
 - Pain over thumb
 - Physical Exam
 - Edema and tenderness over UCL
 - Decreased abduction at MCP
 - Treatment
 - Immobilization -Thumb spica 4-6 weeks
 - Follow Up with ortho



Ulnar Collateral Ligament Thumb



Figure 31. Lee et al., 2016.



Orthopedics

- Jersey Finger
 - Avulsion of flexor digitorum profundus- tendon pulled from bone
 - Symptoms
 - Finger pain
 - Physical Exam
 - Pain and tenderness over volar distal finger
 - Finger is in extension
 - No active DIP flexion
 - Treatment
 - Referral for surgical repair

Jordan, et.al., 2015



Figure 32.



Figure 33. Jordan et.al., 2016



Orthopedics

- Boutonniere Deformity
 - Disruption or rupture of the central slip extensor tendon over PIP
 - Symptoms
 - Pain and deformity at PIP
 - Physical Exam
 - Flexion at PIP, DIP fixed extension
 - X-ray
 - Treatment
 - Extension splitting of PIP not DIP x 6 weeks



Figure 34. Fallah,2013.



Orthopedics

- Mallet Finger
 - Deformity of distal extensor tendon at DIP after forceful flexion
 - Symptoms
 - Pain in distal finger
 - Physical Exam
 - Pain and edema in DIP
 - No AROM DIP- cannot extend
 - Treatment
 - Splint at DIP, (Not PIP) for 6-8weeks
 - PLUS Physical Therapy at 6 weeks mark after splinting
 - Ortho evaluation

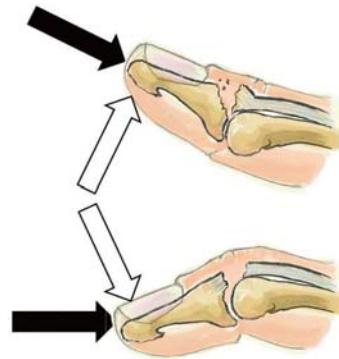


Figure 35 . Salazar et.al.,2016



Figure 36.
Heilman,2010.

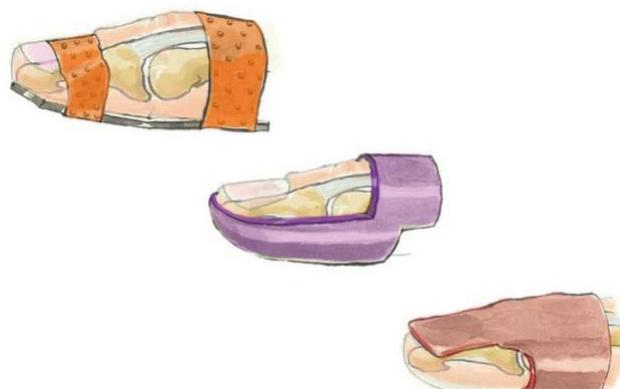


Figure 37 . Salazar et.al.,2016.



Orthopedics

- Trigger Finger
 - Tenosynovitis- inflammation in flexor tendon with thickened A1 pulley
 - Symptoms
 - Pain and catching with flexion and extension
 - Physical Exam
 - Palpable, tender nodule over A1 pulley
 - Treatment
 - Night Splinting
 - NSAIDS
 - Activity decrease
 - Orthopedic Referral- injections, surgical intervention



Orthopedics

- Metacarpal Fractures
 - Symptoms-
 - pain in finger, limited motion ,after trauma
 - Physical Exam
 - Document ROM, open skin, strength, Neurovascularly intact
 - X-ray
 - Treatment
 - Splint-Stable, non rotational
 - Rest, Ice, NSAIDS
 - Orthopedic referral 48-72 hours





Figure 38.Lessara, 2012.



Figure 39. Galtur,2006.



Orthopedics Hip

- Iliotibial Band
- Trochanteric Bursitis
- Hip Fracture



Orthopedics

- Iliotibial Band
 - Fascial band from iliac crest to lateral thigh
 - Symptoms
 - Pain over lateral hip, “popping”, snap – pain better with rest
 - Physical Exam
 - Pain reproducible with hip rotation +/-bursitis at trochanter, +Ober Test
 - X-ray –AP/Lateral hip/pelvis or knee to rule out bone pathology
 - Treatment
 - RICE, NSAIDS, Corticosteroid Injections, Physical Therapy



Iliotibial Band Syndrome

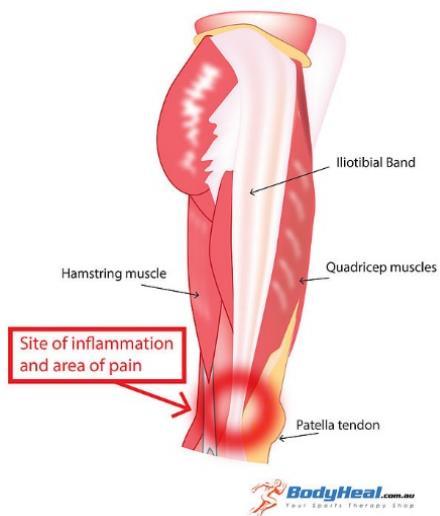


Figure 40. Healthimage,2012.

Figure 41 . Halabchi et.al.,2013.



Orthopedics

- Trochanteric Bursitis
 - Symptoms
 - Pain in lateral hip, cannot sleep on affected side
 - Physical Exam
 - Tenderness over greater trochanter
 - X-ray
 - Treatment
 - NSAIDS, rest
 - Physical Therapy
 - Corticosteroid injections
 - Orthopedic Referral for surgery

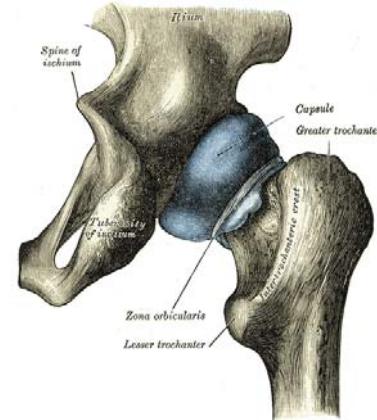


Figure 42. Gray, 1918.



Orthopedics

- Hip Fracture
 - Symptoms
 - Hip pain after twisting or falling on hip
 - Physical Exam
 - Limited External Rotation, Abduction and shortening of the leg->Displaced Fracture
 - Gradual onset, groin pain, Pain with Internal Rotation, Antalgic Gait-> Femoral Neck or Stress Fracture
 - Diagnosis-X-ray
 - Treatment
 - Orthopedic Referral- operative or supported weight bearing





Figure 43.



Figure 44. Heather, 2008.



Orthopedic Knee

- Ligamentous Injury
- Meniscal Tear
- Patellofemoral Pain
- Quadriceps Rupture



Orthopedics

- Ligamentous Tear/ Pain
- Anterior Cruciate Ligament
 - Symptoms
 - “Pop” sound with rapid deceleration
 - Physical Exam
 - Hemarthrosis, +edema,+ Lachman’s test
 - X-ray and MRI
 - Treatment
 - Rehab ,Physical Therapy or Surgery
 - RICE, NSAIDS, DME

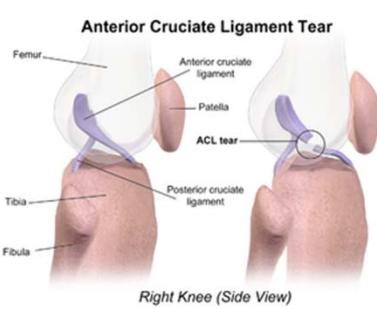


Figure 45. Blaus,2015.

Figure 46. Lam et.al, 2009.



Orthopedics

- Medial Collateral Ligament /Lateral Collateral Ligament
 - Direct blow to medial/lateral knee, varus injury
 - Symptoms
 - Pain
 - Physical Exam
 - Pain, laxity on varus/valgus testing
 - X-ray, MRI-diagnostic
 - Treatment
 - Hinged knee brace, Physical Therapy
 - RICE, NSAIDS
 - Orthopedic Referral



MCL Tear

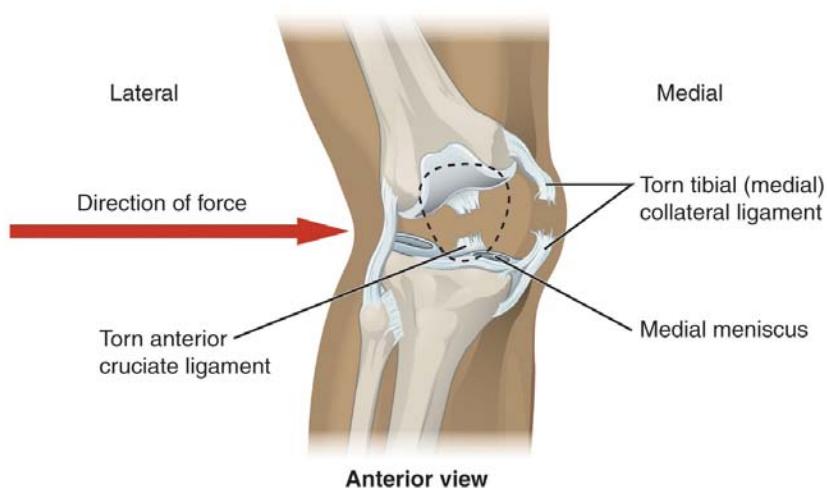


Figure 47. Open Stax College,2013.



Orthopedics

- Meniscal Tear
 - Trauma/ twisting- slower development of symptoms
 - Symptoms
 - Swollen and painful knee, lateral or medial pain with squatting, twisting
 - Physical Exam
 - Effusion, tenderness at joint line, pain with forced flexion + McMurray's Sign
 - Treatment
 - Rest, NSAIDS, Physical Therapy
 - Surgical Intervention



Orthopedics

- Patellofemoral Pain
 - Symptoms
 - Achy Knee pain with flexion, stairs
 - Pain worse with strain on Patellofemoral joint
 - Physical Exam
 - X-Ray, Increased Q angle, Lateral pain with flexion
 - Treatment
 - Activity modification
 - Quadriceps strengthening
 - Knee sleeve with patellar support
 - NSAIDS, ICE



Figure 48. Anatomography, 2014.



Orthopedics

- Quadriceps/ Patellar Tendon Rupture
 - Fall onto partially flexed knee with quadriceps contracted
 - Symptoms
 - Feels “pop”
 - Knee pain
 - Physical Exam
 - Tenderness, edema, ecchymosis
 - Patellar tendon rupture-> Cannot extend against gravity
 - Quadriceps rupture-> unable to perform straight leg raise



- Physical Exam
 - X-ray-
 - Patellar tendon-> patella alta
 - Quadriceps-> patella baja
- Treatment
 - Immobilization
 - Orthopedic referral for possible surgical repair



Figure 49 .Hellerhoff,2010.



Orthopedics- Ankle and Foot

- Ankle/Foot
 - Sprain
 - Plantar Fasciitis
 - Morton's Neuroma
 - Malleolar Fracture
 - Fifth Metatarsal Fracture



Orthopedics

- Ankle Sprain
 - MC Injury
 - Symptoms
 - Ankle pain after twisting injury
 - Physical Exam
 - Tenderness over ligament affected
 - +squeeze test->Tender ATFL while compressing tibia and fibular->high sprain
 - +Anterior drawer sign
 - Ottawa Rules
 - Treatment
 - High=CAM, crutches or Cast
 - Low=ACE, RICE
 - Orthopedic Referral



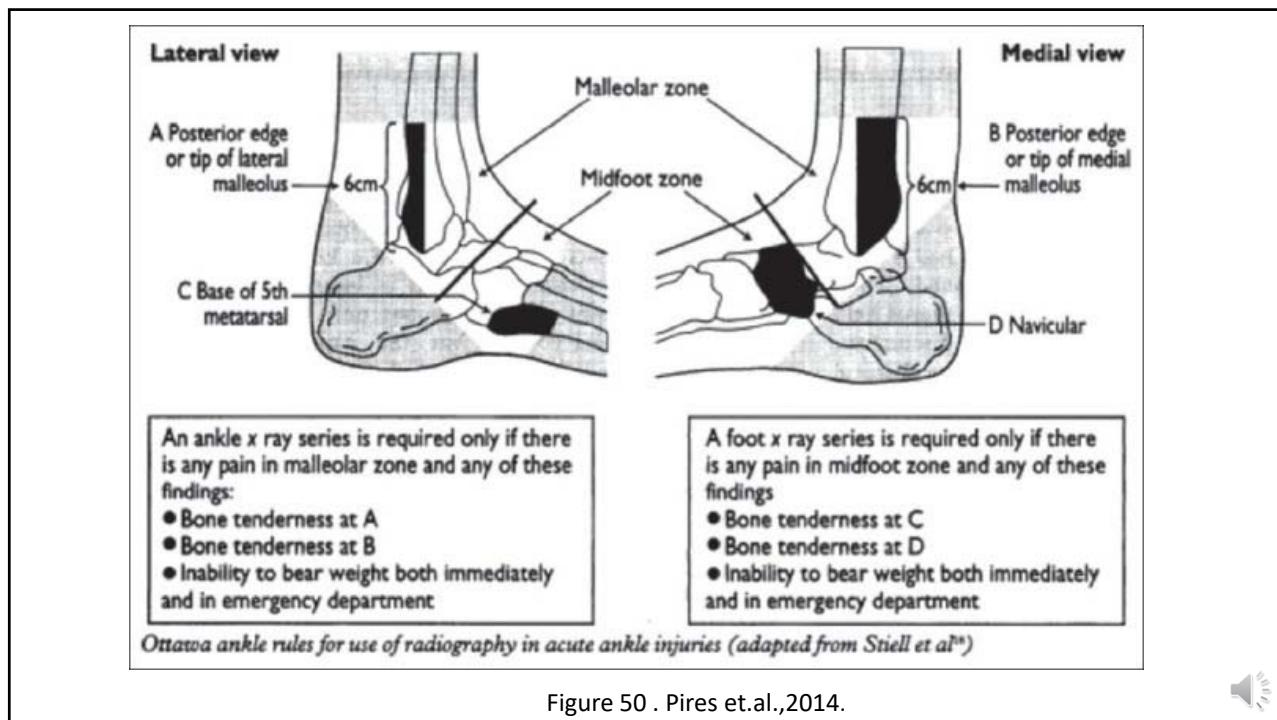


Figure 50 . Pires et.al.,2014.



Figure 51.Gouvas,2008.



Orthopedics

- Plantar Fasciitis
 - MC heel pain
 - Symptoms
 - Pain in heel-worse in morning and with prolonged walking
 - Physical Exam
 - Pain and tenderness to palpation at plantar medial heel
 - X-ray- heel spur, clinical diagnosis
 - Treatment
 - Achilles stretching, cushioned heels, NSAIDS, Night splints

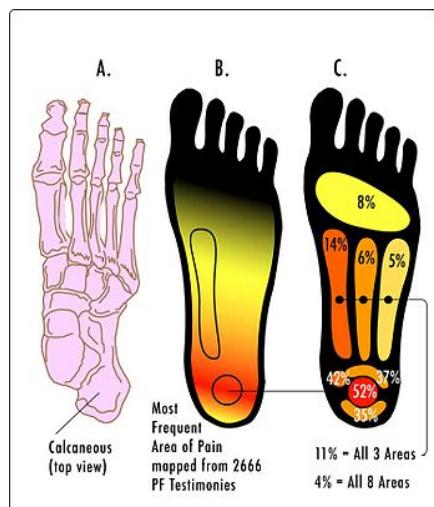


Figure 52. Kosigrim, 2008.



Figure 53. Monfils, 2008.



Orthopedics

- Morton's Neuroma
 - MC women, 2nd and 3rd interdigital nerve
 - Symptoms
 - Plantar pain with weight bearing or narrow shoes
 - Physical Exam
 - Forefoot and plantar pain- palpable neuroma
 - Treatment
 - Wide shoes, Metatarsal pad
 - Corticosteroid injections
 - Referral for surgery



Figure 54. Davis, 2012.



Orthopedics

- Malleolar Fracture
 - Symptoms
 - Pain and tenderness over malleolus
 - deformity
 - Physical Exam
 - Edema, Tenderness, Ecchymosis
 - X-ray
 - Treatment
 - Stable –weight bearing cast
 - Unstable-orthopedics consult urgently



Figure 55. Fruitsmaak, 2008.



Orthopedics

- Fifth Metatarsal Bone Fracture
 - Occurs in 3 areas of bone
 - Symptoms
 - Pain with weight bearing
 - Physical Exam
 - Resisted eversion, tenderness over lateral foot
 - X-ray
 - Treatment
 - Stiff Soled shoe or boot, casting
 - Orthopedic Referral

Figure 56. Monfils, 2008



Orthopedics

- Metatarsal/ Phalanx Fracture
 - Symptoms
 - Limited weight bearing and pain
 - Physical Exam
 - Decreased ROM, deformity
 - X-ray
 - Treatment
 - Dependent on displacement
 - Stiff shoe or walking boot
 - Buddy taping



RED FL

- DVT
 - Pain, erythema, warmth, circumference increase
 - +Homan's
 - Evaluate Risk Factors
 - Recent travel/ surgery/immobilization
 - History of coagulopathy
 - History of DVT/PE
 - Doppler Immediately



Figure 58.Heilman,2010.



- Compartment Syndrome
 - Injury to forearm or lower extremity
 - Pain and tissue compression
 - Immediate referral for fasciotomy



Figure 59.Sarte,2007.



Orthopedics Extras

- Rheumatological Review
 - Gout
 - Ankylosing Spondylitis
 - Reiter's Syndrome
 - Septic Joint



Orthopedics

- Gout
 - Uric Acid overproduction and deposition in synovium
 - Symptoms
 - Pain in joint sudden onset, monoarticular, can be recurrent, Family History
 - Physical Exam
 - Warm, erythematous, tender joint, limited ROM
 - Synovial Fluid Exam, X-ray, Serum Uric Acid
 - Treatment
 - Colchicine
 - NSAIDS
 - Injection
 - Dietary Changes





Figure 60. Heilman,2015.



Orthopedics

- Ankylosing Spondylitis
 - Symptoms
 - Pain and stiffness of spine/LBP, worse in the morning
 - Physical Exam
 - Tender Sacroiliac joint, decreased lordosis
 - X-ray- bamboo spine +/-sacroilitis
 - Treatment
 - NSAIDS
 - Physical Therapy
 - Rheumatology referral



Figure 61.



Orthopedics

- Reiter's Syndrome
 - Symptoms
 - Post viral Syndrome, conjunctivitis and dysuria, joint pain, uveitis +/- fever
 - Physical Exam
 - Conjunctivitis, tender Psoriatic lesions on palms and soles, Arthritis, Non Gonococcal Urethritis, Uveitis
 - Check HLA B27
 - X-ray
 - Treatment
 - NSAIDS, steroids, rheumatology referral



Figure 62. SOA-AIDS Amsterdam,2005.



Figure 63. CDC/Rein,1976.



Orthopedics

- Septic Joint
 - Symptoms
 - Acute onset joint pain
 - Physical Exam
 - Pain over joint, erythema, warmth, edema +/- fever and chills
 - Blood Culture
 - Treatment
 - Referral for IV Antibiotics ,drainage of joint



Orthopedics

- Completed!!



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Cultural, Ethical and Legal Issues

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- Cultural Issues that affect caring for patients
- Ethical Dilemmas we face as Urgent Care Providers
- Legal Implications in Urgent Care Medicine that differ from Primary Care



- Cultural Issues
 - Examine our own stereotypes
 - Examine our own beliefs in non traditional medicine
 - Think about our personal biases



- Barriers to providing Culturally Competent Care
 - Time
 - Stereotyping
 - Lack of resources



- **Becoming Culturally Competent**
 - *A Physician's Practical Guide to Culturally Competent Care- DHHS*
 - *Cross Cultural Clinical Skills*
 - *"Knowledge, respect and validation of differing values, cultures and beliefs, including sexual orientation, gender, age, race ethnicity, and class*
 - *Dealing with hostility/discomfort as a result of cultural discord*
 - *Eliciting a culturally valid social and medical history*
 - *Communication, interaction, and interviewing skills*
 - *Understanding language barriers and working with interpreters*
 - *Negotiating and problem-solving skills*
 - *Diagnosis, management and patient-adherence skills leading to patient compliance"*

US Department of Health and Human Services



Cultural Issues

- Language
- Social/ Ethnical
- Economic
- Gender



- Language Barriers
 - Appropriate Translators
 - Face to Face
 - Telephone
 - Bilingual Staff
 - Family
 - Hearing Impaired Patient's
 - ADA- must provide accommodations
 - Physical Disability
 - Hearing Loss
 - Vision Loss



- Social Issues
 - Understanding socially appropriate behavior differs in various cultures
 - Accommodating safe behaviors
 - Avoiding stereotypes as they may impede appropriate treatment
 - Asking questions about culture
 - "Shall I address you as Mr. Smith or do you prefer John"
 - "You a physical exam, it is permissible for a male to perform this exam?"



- Economical Barriers
 - No Identification/ License
 - No Copay money
 - Fear of a bill
 - Not returning because of unpaid balance
 - No money for transportation
 - No money for co-insurance
 - No money for testing or medication



- Gender Issues
 - Gender
 - Bias
 - Assess healthcare needs
 - Avoid stereotypes
 - Transgender
 - ACA Act 2010 prevents discrimination, HIPPA, Medicare, JNCC
 - Office friendly
 - Aware of health issues
 - Educate Staff



Ethical Issues

- Antibiotics Overuse
- Adding Services
- Drug Prescriptions
- Stark Laws



• Antibiotic Overuse

- #1 Reason to visit Urgent Care is Upper Respiratory Infections
- Antibiotic resistant infections cost a patient \$18-29,000 (APUA,2010)
- Harmful in many ways
 - Increases resistance
 - Increases fitness
 - Increases diarrheal risk pediatric/ geriatric populations
 - Kills the beneficial gut bacteria



- Antibiotic Resistant Infections
 - Methicillin Resistant Staphylococcus Aureus
 - Vancomycin Resistant Enterococcus
 - Clostridium Difficile
 - Neisseria Gonorrhea
 - Carbapenem Resistant Enterobacteriaceae
 - Streptococcus Pneumonia
 - Malaria
 - Tuberculosis MDR, XD MDR



- Ancillary Services
 - Are you comfortable performing the services?
 - Medicolegal Implications?
 - Evidence Based Medicine



Legal Issues

- Demeanor
- Consent
- Documentation
- Discharge
- Follow Up
- Termination
- HIPPA



- Demeanor
 - Medscape Survey 59% of physicians had been named in a lawsuit
 - Nice providers are less likely be sued
 - Caring
 - Time
 - Education
 - Patience
 - Saying “I am Sorry” Does not matter



- Informed Consent

- Provider should advise the patient of:
 - Diagnosis
 - Nature of procedure or treatment proposed
 - Risks and Benefits of procedure or treatment
 - Risks of NOT receiving procedure or treatment
 - Alternatives with risks and benefits



- Consent

- Minors
 - Under 18
 - Pediatrics with caregiver
- Procedures
 - Which Procedures
 - Incision and Drainage
 - Lesions Removal
 - Blood Transfusion
- Photography/ Release of Information and records
- Refusal to Consent



- Documentation
 - Clearly Written Notes
 - Provide Appropriate Information including;
 - Chief Complaint
 - Review of Systems
 - Physical Exam
 - Assessment
 - Treatment Plan
 - Follow Up/referrals
 - Timely documentation



- Discharge
 - Follow Up Written Instructions CLEAR
 - Length of Follow UP
 - With Whom
 - Medication Instructions
 - Laboratory Testing
 - Referral to a Specialist
 - Refusal of Transfer/Treatment



- Terminating Patient Relationships

- Reasons

- Violence/ Verbal Abuse
 - Non Payment
 - Non Adherence
 - Treatment
 - Follow Up
 - Office Policies
 - 30 Day notice



- Terminating Patient Relationships

- Written Letter

- Patient Name
 - Reason
 - Date
 - Interim Care Options
 - Copy of Medical Releases
 - Statement that medical care is the patients responsibility

Shepard & Cahill,2015



- HIPPA
 - Health Accountability and Portability and Labor Act of 1996
 - Consent for records
 - Discussing patient care in office or outside of the office
 - Texting or emailing patient information
- OSHA
- ADA



- Completed!



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