100 CARDINAL PED PRESENTATIONS

Kelly D. Young, MD, MS
Program Director, PEM Fellowship
Harbor-UCLA Medical Center, Torrance, California
Health Sciences Clinical Professor of Pediatrics
David Geffen School of Medicine at UCLA

CASES 91-100

What is this lecture about?

- Pediatric – exclusive to or commonly seen in kids
- Not a Zebra (ie something I've either seen during my career or know has been seen in our PED)
- Not a horse either – ie something you may make it through training without seeing
- Emergency practitioner can make the diagnosis or at least suspect it
- Emergency practitioner *should* make the diagnosis or at least suspect it, and can make a difference by either getting diagnostic studies, appropriate consultations, and starting initial management or by not doing unnecessary work-up

Quick info in 3 slides

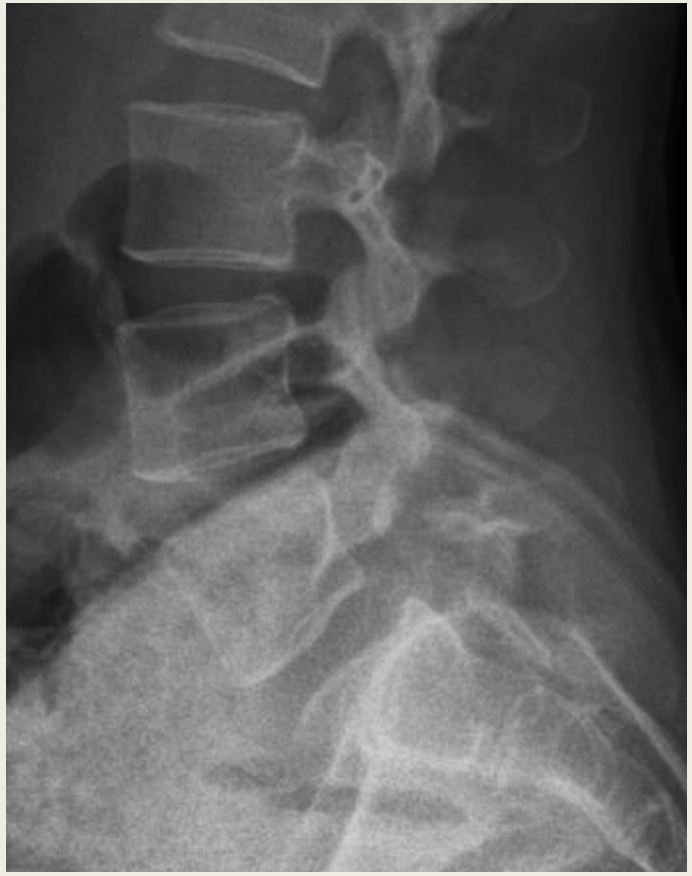
- Classic case – build on illness scripts to reinforce when you should suspect this entity
- What should make you suspect this diagnosis
- Basics of diagnosis and ED management
- You can look it up for more detail, but you can’t look it up until you at least suspect it
- FOAM resources for additional readings

How to use this lecture

- After the initial case presentation, think about the differential diagnosis
- Helpful framework: SPIT
  - *What is the most Serious diagnosis?*
  - *What is the most Probable diagnosis?*
  - *What is the most Interesting diagnosis?*
  - *What is the most Treatable diagnosis (ie what diagnosis should the EP do something about ASAP)?*
- Write down what you think is the diagnosis – commit!
  - *At the end, see how many you got right*

15 year old girl with back pain

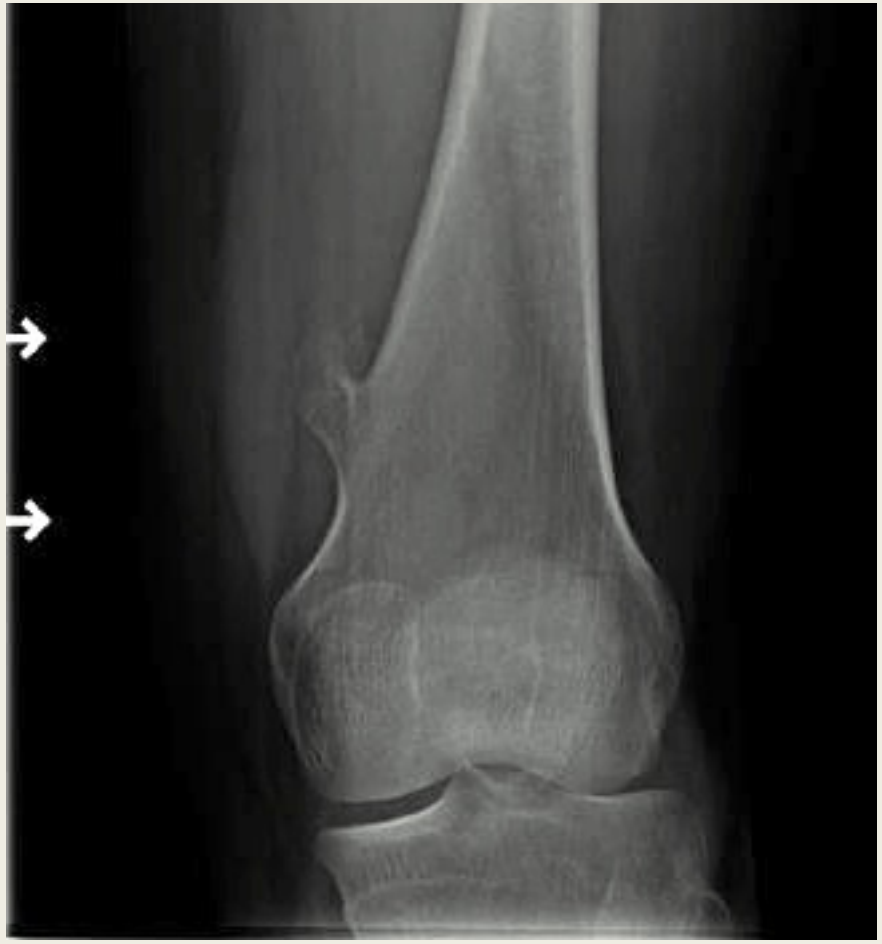
- 15 year old girl is a competitive gymnast, comes in with 2 weeks of low back pain, particularly with activity (especially back bends)
- Pain does not wake her from sleep; no numbness, tingling, incontinence, fever, weight loss, night sweats
- Full range of motion, no pain with forward bend but pain with hyperextension
- Mildly tender midline low back at L5, negative straight leg raise, no saddle anesthesia, normal lower extremity strength and neurologic exam



https://radiopaedia.org

15 year old boy with bone lesion

- 15 year old boy fell while playing soccer and complains of pain at his medial knee joint line
- No previous injury or significant past medical history
- No fever, weight loss, prior pain
- Able to bear weight and walk with minimal limp, no bony tenderness



boneschool.com

15 year old girl with weight loss

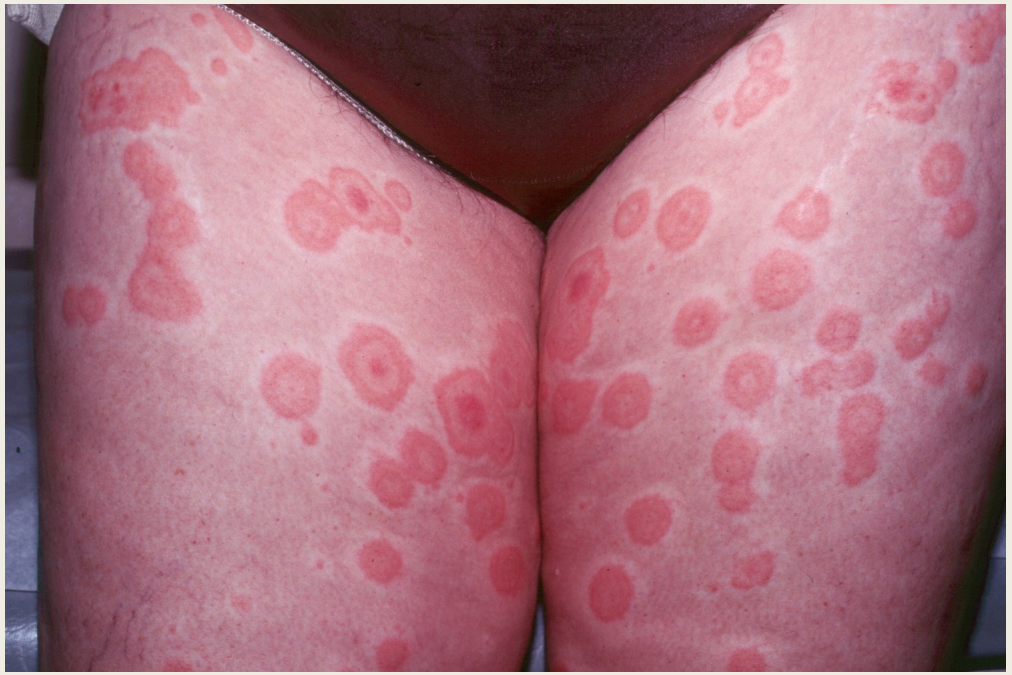
- 15yo previously healthy girl, BIB mother who is concerned about her weight loss, told by outside clinic to go to ED for referral to psychiatrist to r/o anorexia nervosa
- Endorses fatigue, occasional dizzyness and nausea
- VS temp 37.6, HR 80, BP 90/55, RR 18; BMI 15
- Thin, somewhat sullen teen
- HEENT, Cardiac, Lung, Abdominal, Neurologic exams normal
- Dark brown spots on gums and fingernail beds

15 year old boy with right hip pain

- 15yo boy playing soccer had sudden onset left hip pain
- No contact injury or fall, was attempting to kick the ball and missed just before onset of pain
- Able to ambulate with pain/limp and thought would get better, so waited a couple of days and then came to ED
- No significant past medical or family history
- Temp 37.2, HR 90, RR 18, BP 98/40
- No swelling, deformity, ecchymosis
- Pain with passive ROM of hip, and ROM only limited by pain

16 year old girl with rash

- 16yo girl with rash developing over last 24 hours on hands, feet, extremities, moving towards trunk
  - *Palms and soles involved*
  - *Sharply demarcated target lesions*
- No swelling of hands or feet, no fever
- No mucosal lesions
- Recent cold sore on mouth, healing
- Temp 37.5, HR 70, RR 16, BP 110/60



16 year old boy with sore throat, fever, chest pain and dyspnea

- 16 year old previously healthy boy with 4 days of severe sore throat, flu-like symptoms with body aches, weakness, fever
  - *Went to PMD 2 days prior and Rx'd amoxicillin and decadron; monospot and rapid strep neg*
- Now worsening with dyspnea, chest pain, high spiking fevers, light-headedness
- VS: temp 39, HR 133, RR 24, BP 104/60, 02 sat 93% room air
- PE: oropharynx red, no exudate, tonsils 3+, cervical lymphadenopathy present, lungs clear, heart RRR no murmur, abdomen soft, no masses, no rash

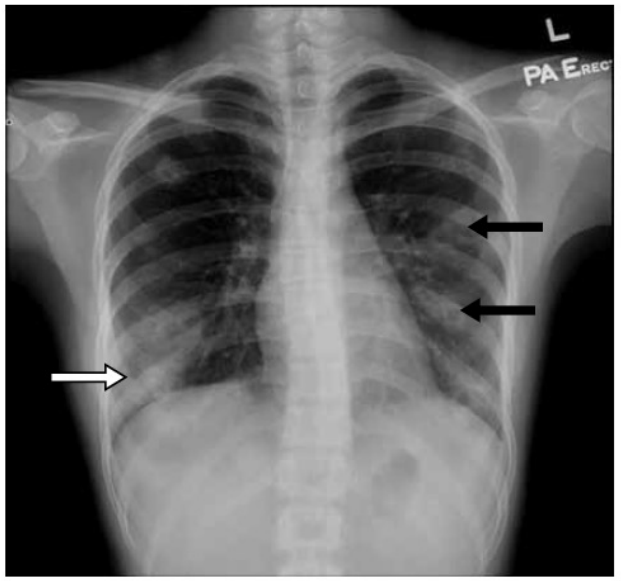
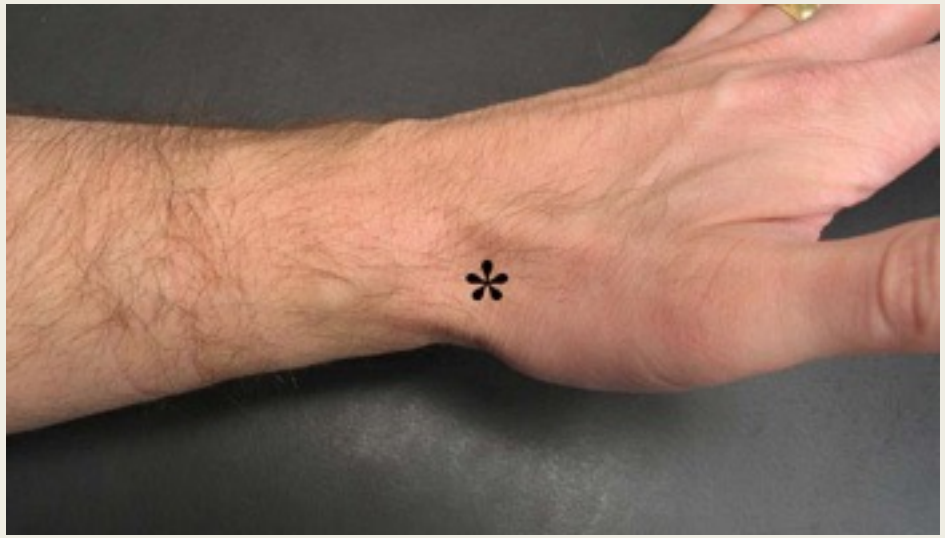


FIG 1. Chest X-ray revealing multiple cavitary lesions of variable size in the bilateral lung fields with no zonal predominance (black arrows)
Area of consolidation is also evident in the right lower zone (white arrow)

hkmj.org DOI: 10.12809/hkmj154696

16 year old boy with wrist pain

- 16 year old soccer player fell on outstretched hand 6 days ago
- Seen at urgent care and diagnosed with wrist sprain
- Still having pain, so decided to come for second opinion
- On exam, no fever, swelling, deformity, ecchymosis. Tenderness over area of asterisk. Distal neurovascular intact



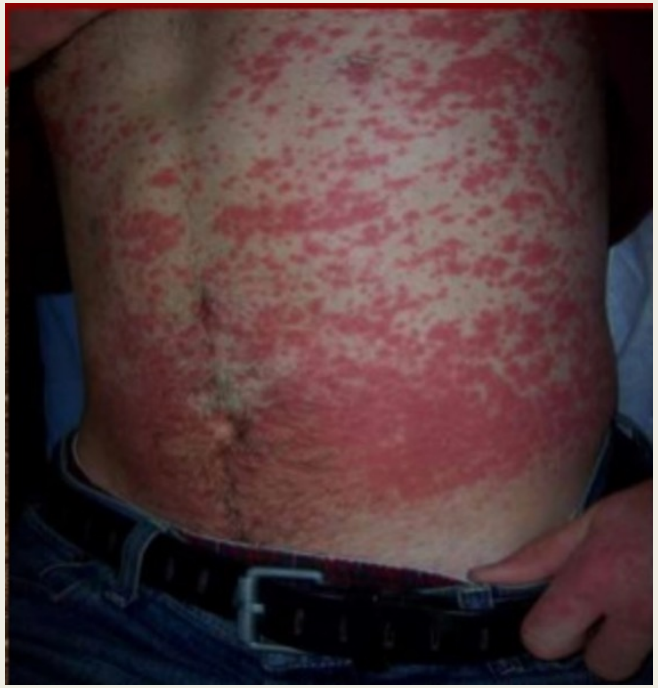
http://orthoinfo.aaos.org

17 year old girl with sore throat

- 17yo girl with sore throat, dysphagia, fever x 3 days
- Seen 2 days ago by primary physician and diagnosed with viral pharyngitis
- Negative PMH and immunizations up to date
- No foreign body suspicion or trauma history
- Temp 39, HR 110, RR 20, BP 95/45, 02 sat 98% on room air
- Alert, nontoxic but in some distress due to pain, no drooling or tripod position
- Oropharyngeal exam mild erythema only, no exudate, no swelling
- Tender anterior cervical lymphadenopathy bilaterally, and tenderness to anterior neck at level of hyoid bone

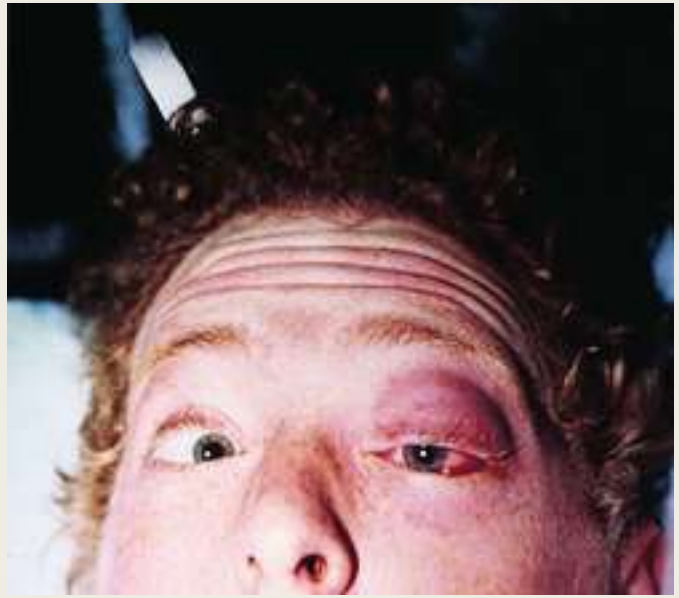
18 year old male with rash after antibiotic treatment

- 18 year old male college freshman with 1 week of fever, sore throat, retro-orbital bilateral headache, generally not feeling well and feeling very tired
- Went to outside clinic 5 days ago and given oral amoxicillin
- Symptoms did not improve, and now patient has broken out in a rash
- Previously healthy, sexually active with 2 partners, uses protection “most of the time”
- Temp 38.0, HR 95, RR 20, BP 100/50. Exudative pharyngitis with no other oropharyngeal findings. Palpable anterior and posterior cervical adenopathy as well as epitrochlear nodes. No nuchal rigidity. Lungs clear. Cardiac RRR, no murmur. Abdomen soft, nontender, no hepatosplenomegaly appreciated. Rash as shown (not on palms or soles).



18 year old female with headache, fever, eye swelling

- 18 year old female with 24 hours of headache, high fever, left periorbital edema and chemosis
- Had nasal discharge and intermittent cough x 2 weeks – saw PMD 10 days ago and given inhaled steroids for presumed allergic rhinitis
- VS: temp 39.2, HR 110, RR 24, BP 98/60
- In addition to periorbital edema and chemosis, left eye ptosis and cranial nerve VI palsy (lateral gaze)



http://medical-dictionary.thefreedictionary.com

Did you write down what you thought the answers were? Answers on following slides

15 year old girl with back pain

- 15 year old girl is a competitive gymnast, comes in with 2 weeks of low back pain, particularly with activity (especially back bends)
- Pain does not wake her from sleep; no numbness, tingling, incontinence, fever, weight loss, night sweats
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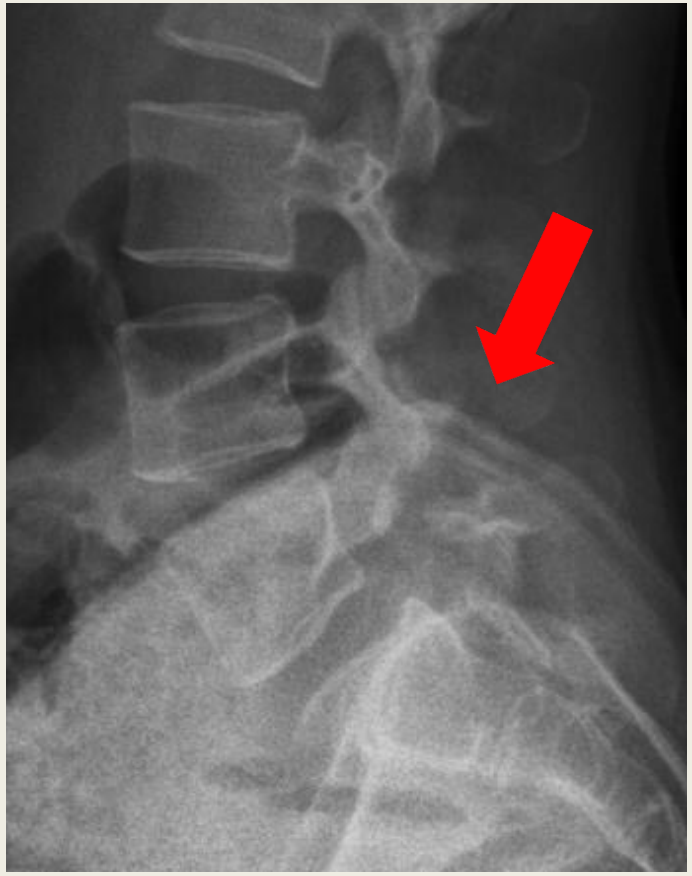
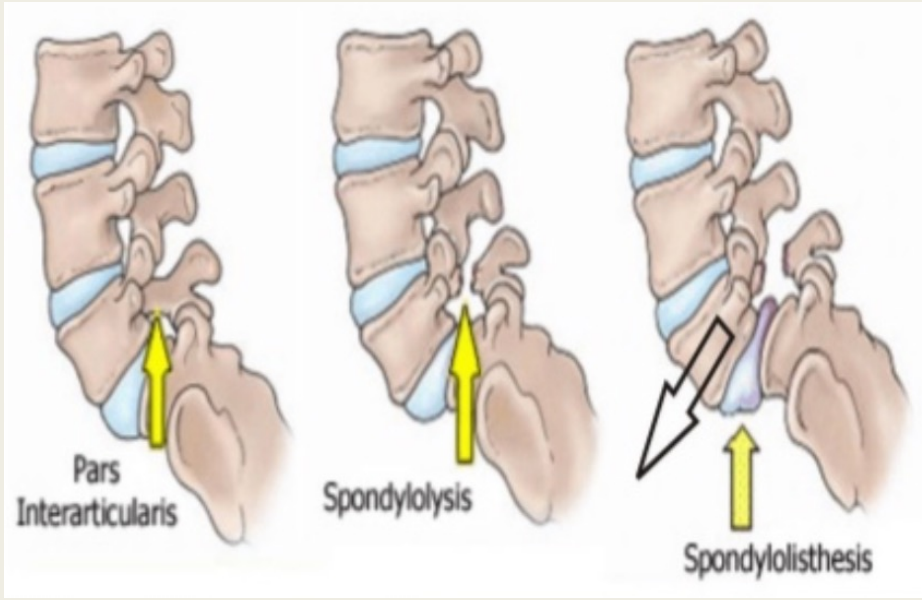


https://radiopaedia.org

Spondylolysis – suspect it

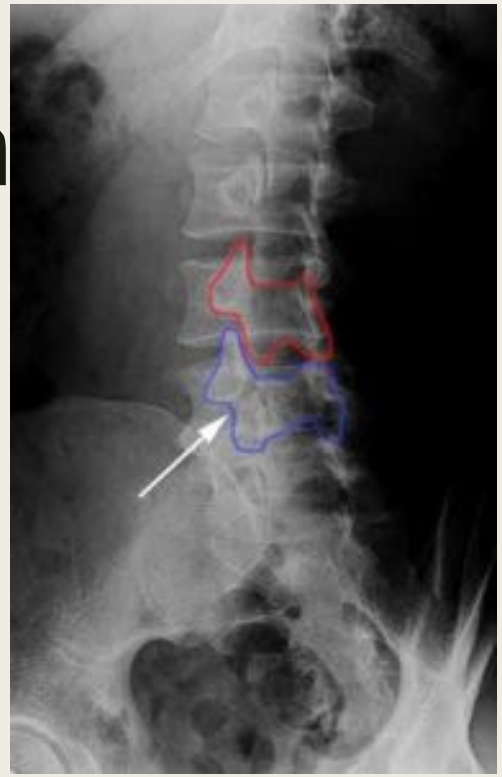
- Spondylolysis is a unilateral or bilateral defect (or fracture) of the pars interarticularis
- 90% occur at L5
- May be asymptomatic or present with low back pain with activity, pain with hyperextension
- Increased in gymnasts, dancers, figure skaters, football linemen, divers, wrestlers, rowers
- Often presents in adolescence, peak age 15-16 years
- Spondylolisthesis is when the vertebra slips anteriorly



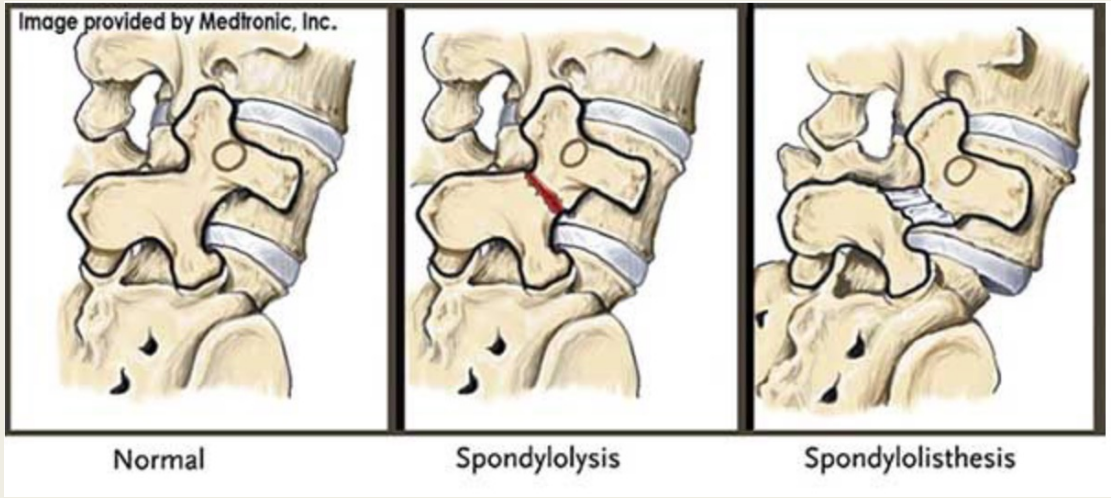
https://www.slideshare.net/MohammedAlali5/spondylolisthesis-and-ddx

Spondylolysis – diagnose and man it

- Xray: look for the “scotty dog”
  - *Spondylolysis shows up as a defect creating a “collar” on the scotty dog*
- Consult with orthopedic specialist for management



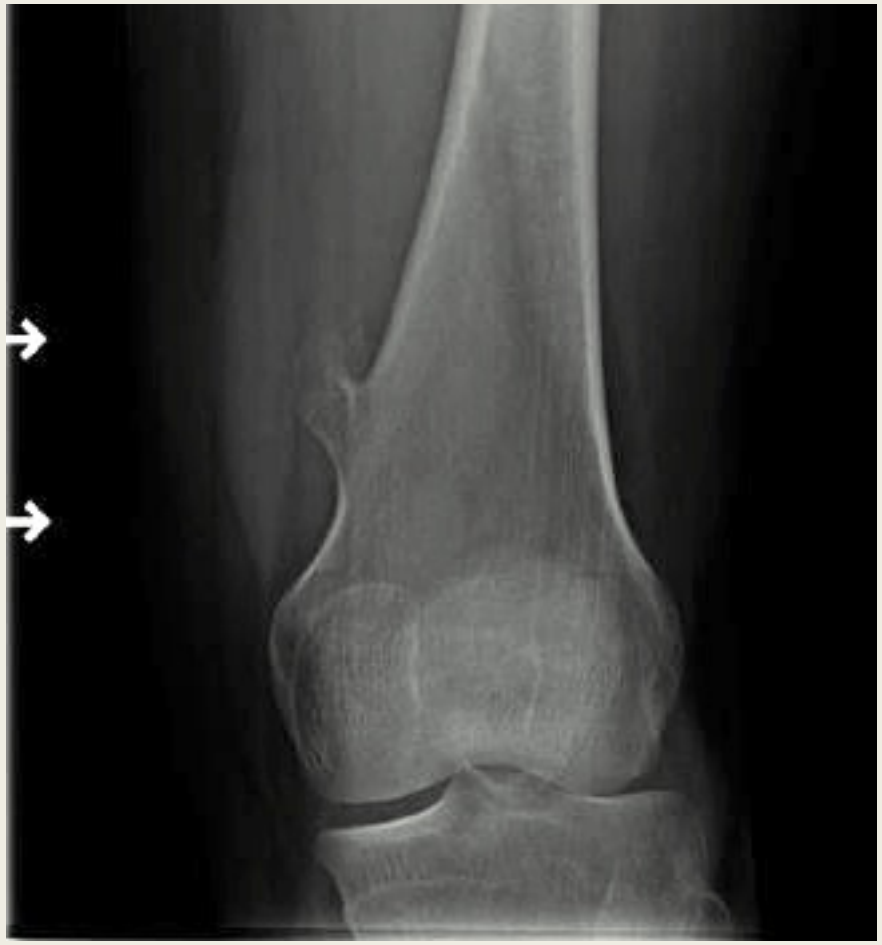
spinemd.com



- For more info on back pain: http://pedemmorsels.com/pediatric-back-pain/ and for adults http://embasic.org/back-pain/ (esp. Show Notes PDF)

15 year old boy with bone lesion

- 15 year old boy fell while playing soccer and complains of pain at his medial knee joint line
- No previous injury or significant past medical history
- No fever, weight loss, prior pain
- Able to bear weight and walk with minimal limp, no bony tenderness
- Protuberant bony lesion on distal femur



boneschool.com

Osteochondroma – suspect it

- Accounts for 50% of benign bone tumors
- Solitary in 90%
- Often picked up incidentally when radiograph done for other reasons
- May present with pain, palpable mass
- Commonly presents during adolescent growth spurt
- Males > females
- Common locations: around knee, proximal humerus, but can also occur elsewhere including axial skeleton, spine
  - *Complications from encroachment on neurovascular structures, spinal canal, pleura and lungs*

Osteochondroma – diagnose and manage it

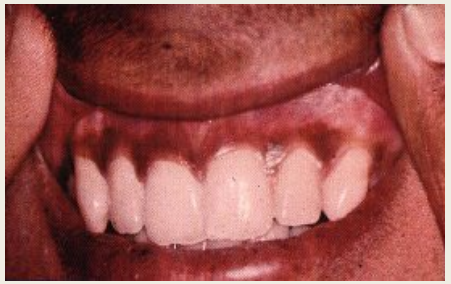
- Characteristic appearance on radiograph
- Multiple osteochondromas (aka exostoses) hereditary, autosomal dominant
- Protuberant bony lesion, often adjacent to physis, directed away from joint, cartilage cap that is usually radiolucent, may be pedunculated
- Small (1%) risk of malignant transformation for solitary, higher for multiple hereditary exostoses
- Follow closely with orthopedist, solitary often stop enlarging with end of growth spurt
  - *Surgical excision if cosmetically problematic, encroaching on important structure, concern for malignancy*
- For more info: https://radiopaedia.org/articles/osteochondroma

15 year old girl with weight loss

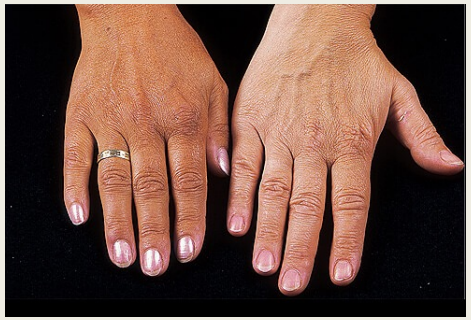
- 15yo previously healthy girl, BIB mother who is concerned about her weight loss, told by outside clinic to go to ED for referral to psychiatrist to r/o anorexia nervosa
- Endorses fatigue, occasional dizzyness and nausea
- VS temp 37.6, HR 80, BP 90/55, RR 18; BMI 15
- Thin, somewhat sullen teen
- HEENT, Cardiac, Lung, Abdominal, Neurologic exams normal
- Dark brown spots on gums and fingernail beds

Adrenal insufficiency (Addison's) – suspect it

- Causes: autoimmune, withdraw chronic steroid tx, TB, trauma, surgery, Waterhouse-Friderichson
- Weakness, fatigue, dizzyness, syncope, (orthostatic) hypotension
- Anorexia, weight loss, N/V/D, abd pain (often mistaken for anorexia nervosa in adolescent girl)
- Salt craving, low Na, high K
- Hyperpigmentation (ACTH stimulates melanocytes, appears tanned/bronzed
  - *Esp mucous membranes, palmar creases, nailbeds, areolae, new scars*
- Refractory severe shock, peripheral vascular collapse
- Nausea, vomiting
- May have severe abdominal, flank, back, leg pain
- Renal insufficiency or failure with azotemia
- Hypothermia, but more often hyperthermia / fever (as high as 105)
- Altered mental status, coma
- May be brought on by a stressor: illness, infection, surgery, trauma



pedclerk.bsd.uchicago.edu



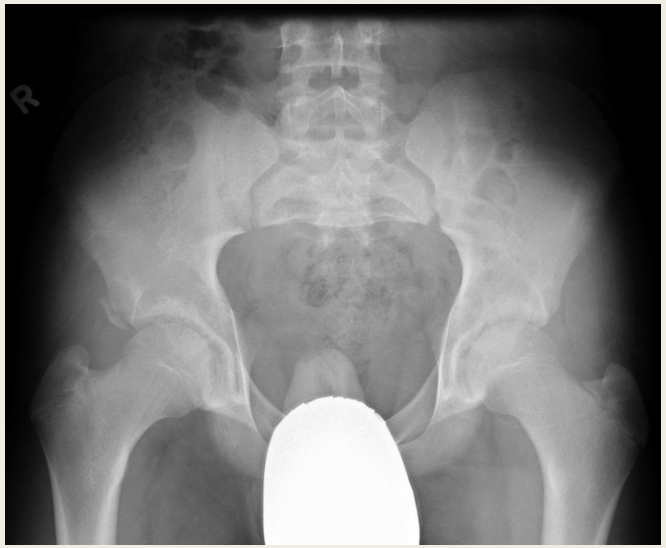
www.medicinenet.com

Adrenal insufficiency – diagnose and manage it

- Labs: low Na, High K (Na:K < 30:1) due to aldosterone deficiency, may have hypoglycemia, eosinophilia
  - *Check for hypothyroidism, diabetes (polyglandular deficiency syndrome)*
- Diagnosis by ACTH cosyntropin stim test
  - *Low random plasma cortisol may be diagnostic if very low*
- CT scan is imaging study of choice to evaluate adrenal glands
- IVF, dextrose after initial boluses, stress dose hydrocortisone if hypotensive, treat hyperkalemia, may need fludrocortisone, pressors if refractory hypotension
- Dexamethasone instead of hydrocortisone if ACTH cosyntropin test not done yet – doesn't interfere with serum cortisol assay
- More reading: https://pedclerk.bsd.uchicago.edu/page/addisons-disease and http://www.emdocs.net/adrenal-crisis-in-the-ed/

15 year old boy with right hip pain

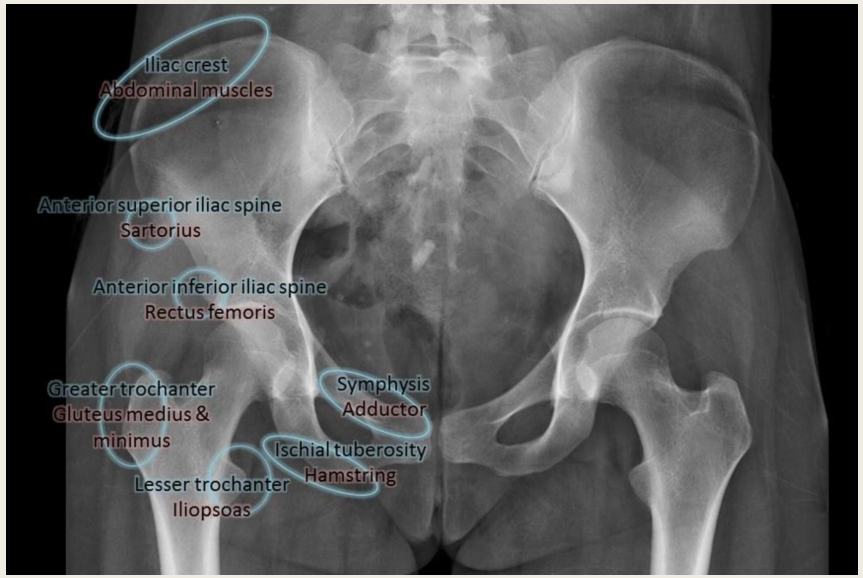
- 15yo boy playing soccer had sudden onset left hip pain
- No contact injury or fall, was attempting to kick the ball and missed just before onset of pain
- Able to ambulate with pain/limp and thought would get better, so waited a couple of days and then came to ED
- No significant past medical or family history
- Temp 37.2, HR 90, RR 18, BP 98/40
- No swelling, deformity, ecchymosis
- Pain with passive ROM of hip, and ROM only limited by pain
- What is the diagnosis?



https://images.radiopaedia.org

Pelvic avulsion fracture – suspect it

- The xray on the previous slide shows an avulsion fracture of the Anterior inferior iliac spine
- Adolescents and young adults aged 14-25 years
- Forceful contraction of tendon or ligament avulses a fracture fragment, especially at apophyses
- Soccer, tennis, hurdlers & sprinters, gymnasts / dancers / cheerleaders
- Male:female 2:1
- Sudden onset pain with non-contact injury



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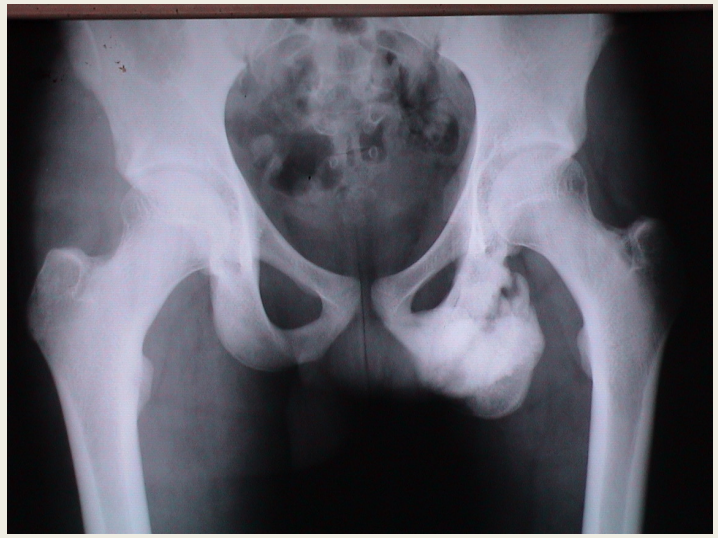
Pelvic avulsion fracture – diagnose and manage it



- Look carefully at pelvic film (don't order hip film – need to see entire pelvis) at common areas of avulsion fractures
- If come in with longer period of symptoms, often have exuberant callus formation – can be mistaken for a tumor
- Conservative management generally successful: rest initially, analgesics, then gradual increase in ROM exercises, stretching and strengthening, and resumption of activity
- Consult with orthopedist or sports medicine specialist for follow-up
  - *Occasional patients fail nonoperative treatment or have displacement ≥ 2-3cm and require surgery*

- For more info: http://keeweedoc.com/2014/11/kickingit/
- http://pedemmorsels.com/pelvic-avulsion-fractures/
- http://learningradiology.com/notes/bonenotes/pelvicavulsionfxs.htm

Review article: http://www.healio.com/orthopedics/hip/journals/ortho/2009-1-32-1/{49c02035-72df-43aa-868b-be25e911ba6c}/apophyseal-avulsion-fractures-of-the-hip-and-pelvis

16 year old girl with rash

- 16yo girl with rash developing over last 24 hours on hands, feet, extremities, moving towards trunk
  - *Palms and soles involved*
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- No swelling of hands or feet, no fever
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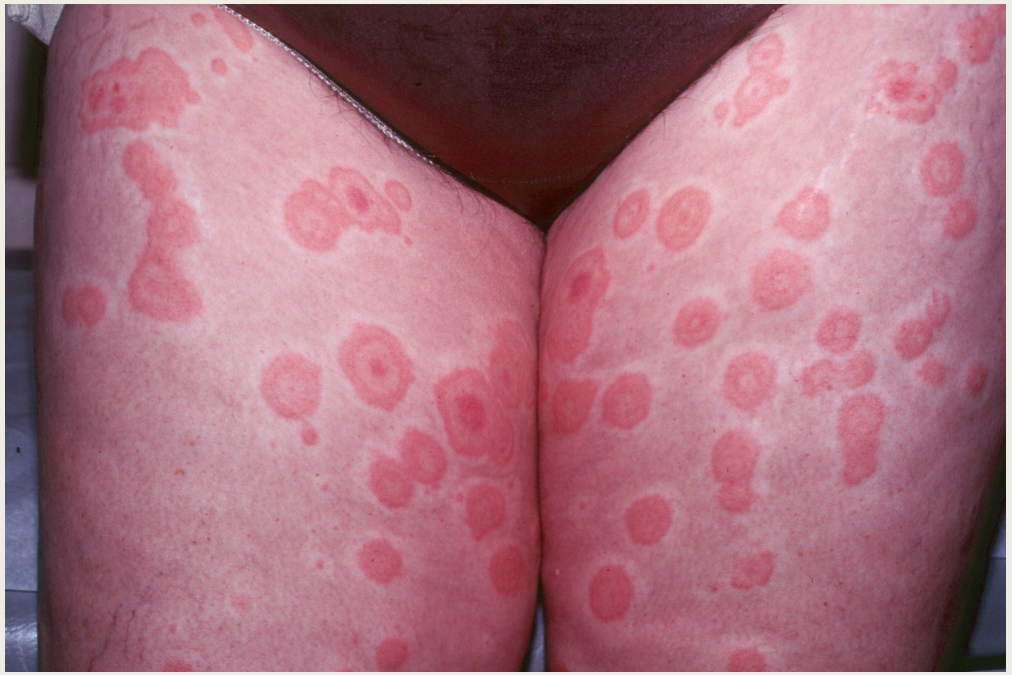

Erythema multiforme - suspect it

- Hypersensitivity reaction, usually to an infection, most commonly HSV
  - *Mycoplasma, zoster, adenovirus, hepatitis viruses, HIV, CMV, viral vaccines*
  - *Unlike Steven—Johnson syndrome, drugs uncommon cause (<10%)*
- Few to hundreds of target lesions develop over 24 hours, usually starting on extremities, may involve palms and soles
  - *Dusky center or blister or crust, paler inner ring, bright red outer ring*
- E. multiforme major: mucosal lesions present (m/c oral, but anywhere)
- E. multiforme minor: no mucosal lesions

Erythema multiforme – diagnose and manage it

- E. multiforme is a clinical diagnosis
- Differentiate from SJS, TENS
- Treat trigger (eg with acyclovir, cease offending drug)
- Symptomatic care, self-limited (over weeks)
- Severe disease often treated with prednisone taper (evidence unclear)

Table 1. Differences in Clinical Characteristics

Characteristic	EM	SJS	SJS-TEN Overlap	TEN
% BSA involved in detachment	<10%	<10%	10%-30%	>30%
≥ 1 mucous membrane affected	Up to 70%	>90%	>90%	>90%
Typical targets	Yes	No	No	No
Spots	No	Yes	Yes	Yes
Atypical targets	Raised	Flat	Flat	Flat
Mortality	Rare	10%	30%	50%
Common cause	Infection	Medication	Medication	Medication
Recurrent[a]	Yes (30%)	No	No	No
Sequelae[b]	Rare	Common	Common	Common

[a] Highly suspected medication has been discontinued with no rechallenge or initiation of drugs with cross-reactivity to causative agent.
[b] Includes physiological long-term complications, such as ocular sequelae, and not psychological conditions.
BSA: body surface area; EM: erythema multiforme; SJS: Stevens-Johnson syndrome; TEN: toxic epidermal necrolysis.
Source: References 5, 6.

www.uspharmacist.com

For more information http://www.dermnetnz.org/topics/erythema-multiforme/ and http://www.regionalderm.com/Regional_Derm/Efiles/erythema_multiforme.html

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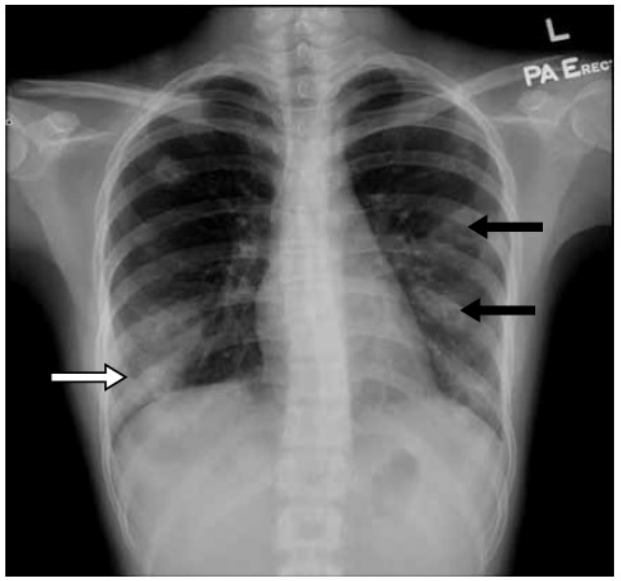
Abnormal CXR



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Area of consolidation is also evident in the right lower zone (white arrow)

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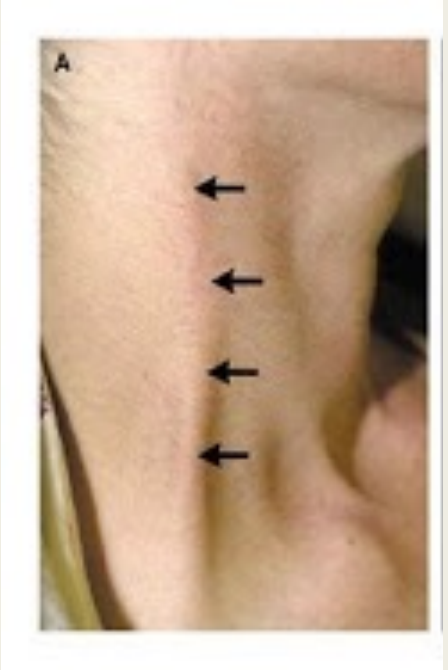
Lemierre's syndrome – suspect it

- Lemierre's is infectious thrombophlebitis of internal jugular vein
- Preceding pharyngitis, usually < 1 week prior to thrombophlebitis
  - *Most common organism is fusobacterium necrophorum, and anaerobic gram negative rod*
- More common in adolescents and young adults
- May have pulmonary septic emboli with dyspnea, chest pain, hypoxia, hemoptysis, infiltrates, cavitary lesions, and/or pleural effusions on CXR
- May have neck pain, swelling, or visible / palpable thrombophlebitis of the external jugular vein



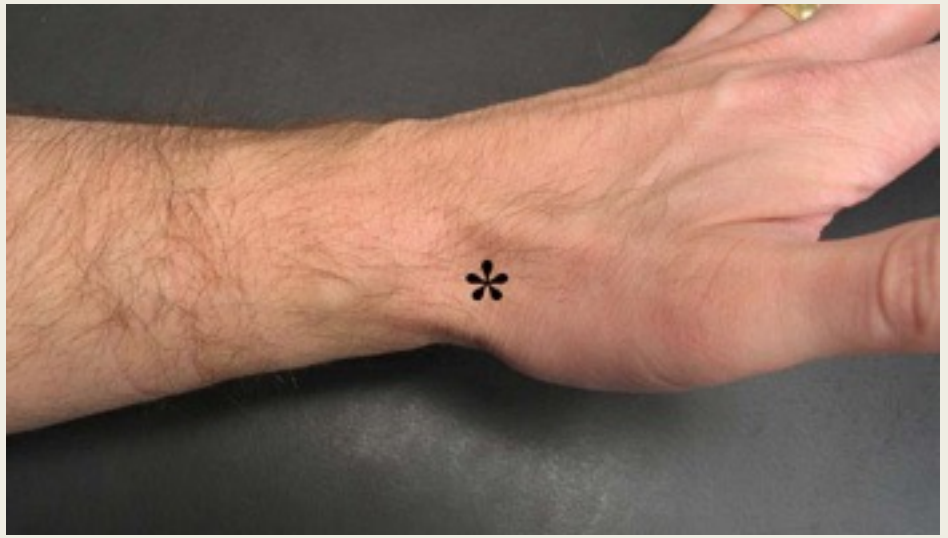
http://tonsilitisunderstood.blogspot.com

Lemierre's syndrome – diagnose and manage it

- Jugular venous thrombus and septic emboli seen on CT scan
- Microbiologic diagnosis from blood culture and culture or purulence
- Early antibiotics
  - *Piperacillin-tazobactam, ticarcillin-clavulanate, ampicillin-sulbactam, or a carbapenem*
- Surgical drainage of any purulent fluid collections
- Utility of anticoagulants unclear
- Supportive therapy with resuscitation as needed in ICU setting
- Consult intensivist, ID specialist
- For more info: http://anaerobicinfections.blogspot.com/p/lemierres-syndrome.html and http://tonsilitisunderstood.blogspot.com/p/lemierre-syndrome.html

16 year old boy with wrist pain

- 16 year old soccer player fell on outstretched hand 6 days ago
- Seen at urgent care and diagnosed with wrist sprain
- Still having pain, so decided to come for second opinion
- On exam, no fever, swelling, deformity, ecchymosis. Tenderness over area of asterisk. Distal neurovascular intact



http://orthoinfo.aaos.org

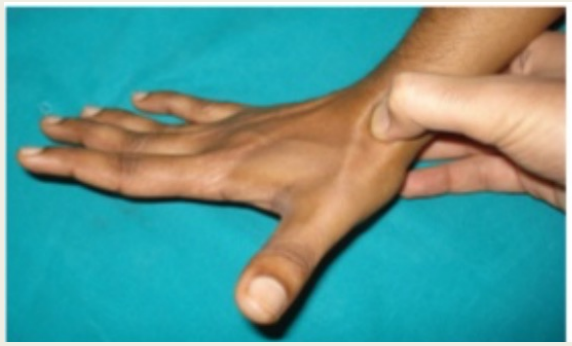
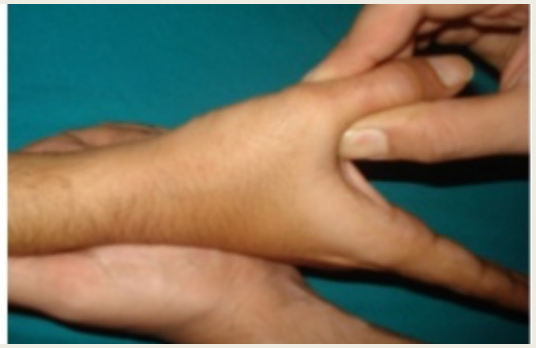
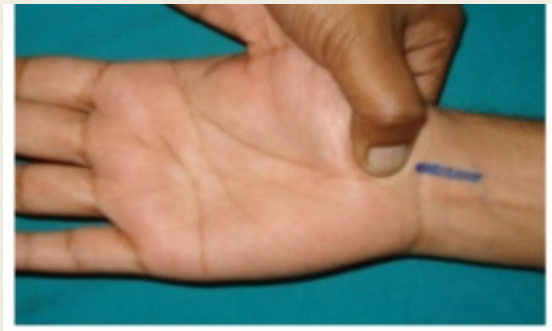
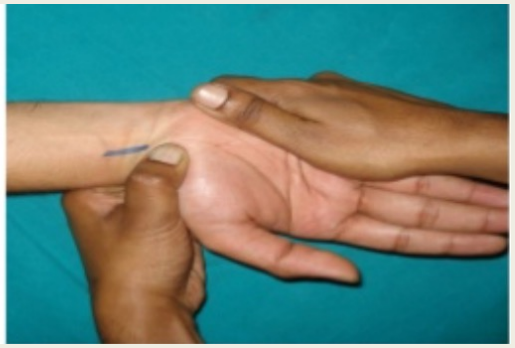
Scaphoid fracture – suspect it

History

- Reported from age 10 to 70 years, but most common in older adolescents and young adults
- Axial load or hyperextension injury, commonly fall on outstretched hand
- Often initially missed, dx'd as sprain

Physical exam

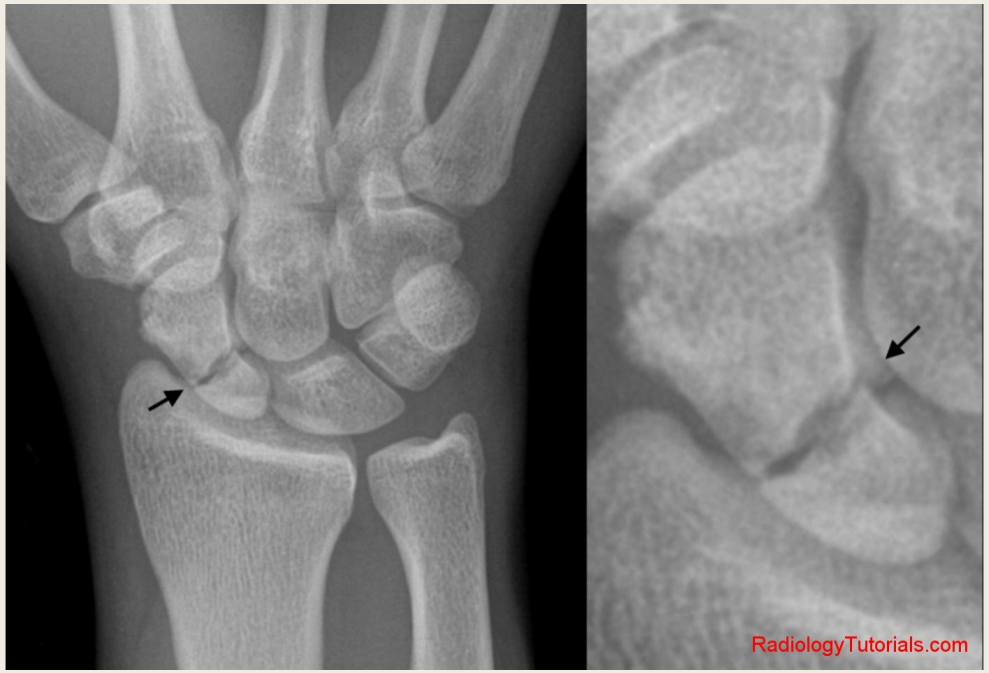
- 1) tenderness in snuffbox
- 2) pain on axial loading of thumb
- 3) tenderness at volar aspect of scaphoid
- 4) Watson scaphoid shift test: palpate scaphoid tubercle as move wrist into radial deviation from ulnar -> pain w/shift

https://www.slideshare.net/abdulsherwani/distal-radius-scaphoid-fracture

Scaphoid fracture – diagnose and manage it

- Need to perform physical exam maneuvers to suspect scaphoid fracture in all w/wrist pain
- Look carefully at radiograph
  - *Consider dedicated scaphoid view*
- Even if radiograph negative, if have snuffbox tenderness / indications of scaphoid fracture, immobilize and refer to Orthopedics
  - *High risk of avascular necrosis and malunion due to poor blood supply*
- For more info: https://www.hawaii.edu/medicine/pediatrics/pemxray/v1c14.html and https://lifeinthefastlane.com/scaphoid-fractures-the-ed-perspective/ and https://www.youtube.com/watch?v=DGH-pHmeLnQ



17 year old girl with sore throat

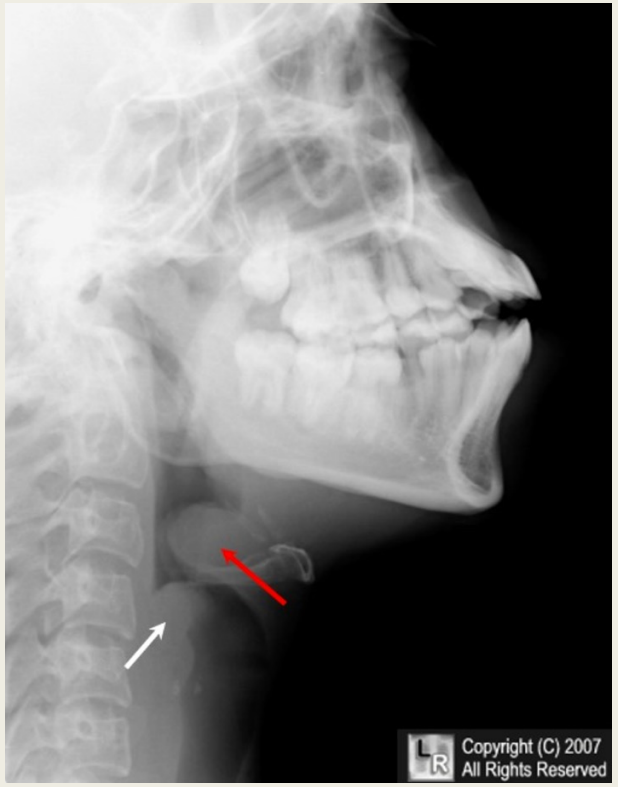
- 17yo girl with sore throat, dysphagia, fever x 3 days
- Seen 2 days ago by primary physician and diagnosed with viral pharyngitis
- Negative PMH and immunizations up to date
- No foreign body suspicion or trauma history
- Temp 39, HR 110, RR 20, BP 95/45, O2 sat 98% on room air
- Alert, nontoxic but in some distress due to pain, no drooling or tripod position
- Oropharyngeal exam mild erythema only, no exudate, no swelling
- Tender anterior cervical lymphadenopathy bilaterally, and tenderness to anterior neck at level of hyoid bone

Epiglottitis – suspect it

- With the advent of widespread immunization for *H. influenzae*, epiglottitis no longer a disease of children
  - *When it occurs in pediatric emergency medicine, adolescents or young adults*
- Fever; sore throat and dysphagia out of proportion to oropharyngeal exam findings; may or may not appear toxic
  - *Consider in the patient with repeat visit for worsening sore throat*
- May have hot potato voice, tender cervical lymphadenopathy
- Suspect with tenderness anterior midline neck at level of hyoid bone
- Maintain high index of suspicion since presents less acutely compared to classic pediatric presentation
- May progress to airway obstruction rapidly or may have subacute course

Epiglottitis – diagnose and manage it

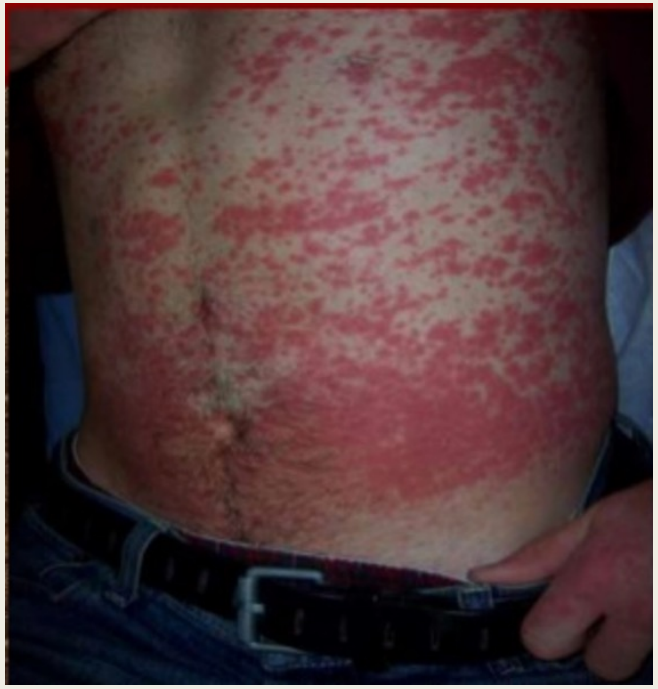
- Lateral neck xray with thumbprint sign – swollen epiglottis, and may have swollen aryepiglottic folds
- If concern for airway issue, do not send to xray suite
  - *Keep in position of comfort*
  - *Consult ENT surgeon to examine*
- Airway management decision based on clinical course
  - *Admit to ICU setting for close observation*
  - *If requires airway management, preferably in O.R. controlled environment with ENT*
  - *If emergent, most skilled practitioner intubates, have smaller ETT available, do not use supraglottic airways, be ready for cricothyrotomy*
- IV antibiotics 3rd generation cephalosporin or ampicillin-sulbactam + vancomycin for MRSA coverage if high prevalence geographic area
- For more info: http://www.foamem.com/2014/07/21/adult-epiglottitis-not-just-a-hot-potato/ and https://coreem.net/core/epiglottitis/



http://learningradiology.com/archives2007/COW%20269-Epiglottitis/epiglotttiscorrect.html

18 year old male with rash after antibiotic treatment

- 18 year old male college freshman with 1 week of fever, sore throat, retro-orbital bilateral headache, generally not feeling well and feeling very tired
- Went to outside clinic 5 days ago and given oral amoxicillin
- Symptoms did not improve, and now patient has broken out in a rash
- Previously healthy, sexually active with 2 partners, uses protection "most of the time"
- Temp 38.0, HR 95, RR 20, BP 100/50. Exudative pharyngitis with no other oropharyngeal findings. Palpable anterior and posterior cervical adenopathy as well as epitrochlear nodes. No nuchal rigidity. Lungs clear. Cardiac RRR, no murmur. Abdomen soft, nontender, no hepatosplenomegaly appreciated. Rash as shown (not on palms or soles).



https://www.slideshare.net/ostaz2000/infectious-mononucleosis-49660354

Infectious mononucleosis with post-amoxicillin rash – suspect it

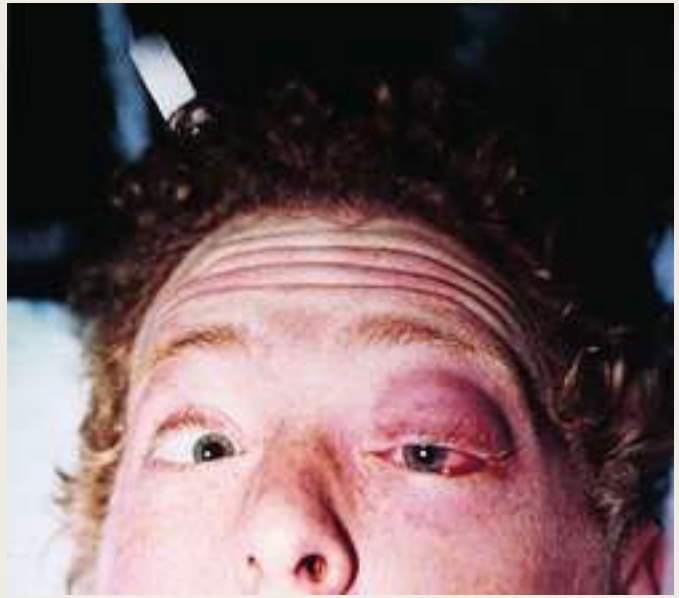
- Infectious mononucleosis, due to Epstein-Barr virus, commonly seen in adolescents (peak age 15-24 years), particularly when in close quarters such as college dorms
  - *Transmitted through oral secretions / saliva = "kissing disease"*
- Fever (usually low-grade), exudative sore throat, generalized lymphadenopathy (notably posterior cervical and epitrochlear nodes), headache (often retroorbital), malaise, fatigue, splenomegaly in 50-60% (although may not be palpable initially)
- 10% have a morbilliform rash, usually on arms and trunks
  - *30% or more have a worsened rash if given antibiotic, especially amoxicillin or ampicillin, typically 2-10 days after antibiotic started*
  - *Previously thought that nearly all patients with infectious mononucleosis develop rash after amoxicillin, but this has been debunked* http://www.2minutemedicine.com/antibiotic-induced-rash-in-children-with-mononucleosis-much-lower-than-previously-reported/

Infectious mononucleosis with post-amoxicillin rash – diagnose and manage it

- Initially infectious mononucleosis is a clinical diagnosis based on history and physical exam
- Monospot test (but may have false negatives), CBC with leukocytosis and atypical lymphocytosis, EBV titers confirmatory
- In a sexually active patient such as this one, consider and test for syphilis and primary HIV infection
- Treatment is primarily supportive, with symptoms improving in 2-4 weeks (but fatigue may persist for months)
  - *Avoid aspirin due to risk of Reye syndrome*
- Due to risks of splenomegaly and splenic rupture, no sports or strenuous activity at all for 3 weeks after symptom onset, no contact sports for 4 weeks
- For more info: http://pedemmorsels.com/mono/ and http://www.emdocs.net/splenic-infarction-in-mononucleosis-pearls-and-pitfalls/

18 year old female with headache, fever, eye swelling

- 18 year old female with 24 hours of headache, high fever, left periorbital edema and chemosis
- Had nasal discharge and intermittent cough x 2 weeks – saw PMD 10 days ago and given inhaled steroids for presumed allergic rhinitis
- VS: temp 39.2, HR 110, RR 24, BP 98/60
- In addition to periorbital edema and chemosis, left eye ptosis and cranial nerve VI palsy (lateral gaze)



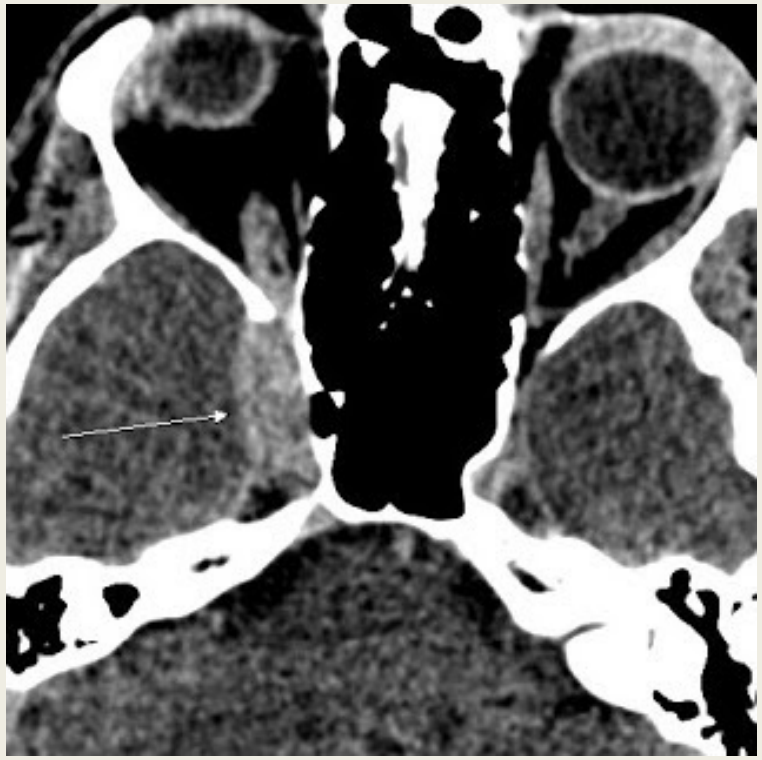
http://medical-dictionary.thefreedictionary.com

Cavernous sinus thrombosis – suspect it

- Septic thrombophlebitis of the cavernous sinus
- Typically originates in infection of face, sinuses, ears, teeth, or orbit
  - *Sinusitis (sphenoid or ethmoid) most common precipitant*
- Increased risk if hypercoagulable state
- Fever, headache
- May have periorbital edema, chemosis, progressing to proptosis
  - *Eye symptoms often rapidly spread to other eye in 24-48 hours*
- Ophthalmoplegia, particularly affecting CN VI

Cavernous sinus thrombosis – diagnose and manage it

- CT demonstrates cavernous sinus thrombosis
- Early broad-spectrum antibiotic treatment is key
  - *Ceftriaxone or cefotaxime, vancomycin, metronidazole*
- Anticoagulant therapy controversial
- Resuscitate as needed and consult intensivist, ID specialist, and hematologist ASAP
  - *Consult with surgeon to drain any purulent fluid collections (send for culture)*
- For more info: http://www.emdocs.net/cavernous-sinus-thrombosis/and https://radiopaedia.org/articles/cavernous-sinus-thrombosis



http://sumerdoc.blogspot.com