The Orthopedic things I wish I knew in 1998....

Department of Emergency Medicine
Grand Rounds
June 10 2014
OBJECTIVES

• ED perspective on......
• Shoulder posterior dislocations
• Joint injections and arthroplasty
• Elbow dislocations
Missed Posterior Dislocation

- Shoulders
  - Pearls
    - Electrocution, Epilipsy, Etoh
  - What does the normal joint look like
  - If you can’t say it’s in joint, it’s out
    - dislocation vs subluxation
  - Radiographic evidence of reduction is key
Normal shoulder
Head of humerus
Glenoid
Coracoid
Posterior dislocation
Reduction Techniques

- whatever technique used...Elbow must be able to cross the midline freely to be in joint
- During traction: Internal and external rotation cycles is key
- Sedation is paramount... Propofol is king
Do’s and don’t of arthroplasty joints

• 67 yr old female presents with crescendo pain, known OA, has seen surgeon.

• 3/12 away from total Knee arthroplasty

• Can’t stand the pain anymore….wants something done!!!
What do you need to rule out?

- Different from the painful joint without OA?
- Think NIFTI
- N-neurological (remember sciatica)
- I-infection
- F-fracture
- T-tumor
- I-Inflammatory arthritis flare
Investigations

- repeat plain film
- CBC, crp(ESR)

- ...Do you stick a needle in??
Joint aspiration

- Inflammatory: crystals (gout, CPPD)
- Infections: Pus, organisms (cell count/gram stain)
- Symptom relief…
- Steroid injection +/- local
- …Synvisc…Durolane….
- CAUTION: joint aspiration delays arthroplasty by 6/12 minimum
Post arthroplasty

- Painful knee post op…. what’s normal
- Knee: 6/12 painful rehab… opiates x 6 weeks
- Hip: 1/52 ADL’s independently in those doing independent pre-op, opiates x 1-2/52
- Is the joint infected??
- Hx is key
Post arthroplasty infections

- Immune-compromised
- Primary vs revision surgery
- Diabetic
- Obesity
- Previous infection
- Incisional discharge? often difficult to interpret
- Constitutional symptoms
- Blood work CBC/crp
- Always refer to arthroplasty surgeon’s next clinic if not admitting
Post arthroplasty infections

- Needles only go in arthroplasty joints **AFTER** discussion with operative surgeon/Orthopod on call

- Document clearly the details of the discussion with the arthropod

- Oral antibiotics will do **NOTHING** for a joint infection, except delay Dx and treatment

- Definitive treatment is operative
  - early(within 2/12)(arthroscopic wash out, then 6/52 antibiotics minimum pending bloods normalize)
  - Late: revision (2 stage-antibiotic spacer, IV antibiotics, then Revision once blood work/symptoms normalize)
Pearls

• Beware the early presenter when awaiting arthroplasty surgery

  • Patients generally unhappy when surgery gets delayed

  • Risk of IATROGENTIC joint sepsis

• Joint aspiration is not a benign process

• Needles only enter joints with arthroplasty AFTER discussion with Orthopedics
The basics..

Total hip arthroplasty vs. hemiarthroplasty
Hemi arthroplasty

- lacks acetabular component
- Generally more reducible
- Less likely to stay dislocated
- withstands more vigorous reduction attempts
Reduction Techniques
Reduction

- Sedation is key…propofol
- 2 person technique
- One stabilizes pelvis other manipulates extremity
- Bolster after reduction(at least until awake). Discuss admission with orthopaedics on call or operative surgeon
Elbow dislocations

fluoroscopy is key
19 yr old female, celebrating 19th birthday, slips on grass, falls in lake

- Complains of elbow pain
- Etoh ++++
- Vomiting ++++
Post reduction film

now what??
What and how will you manage this?
Take 2....
Flouroscopic guided reduction

• Valpoe intergrated backslab
• Immobilized
• Consider sugar tong splint
• Ensure vascular/nerve integrity pre-post and document
• Orthopedics clinic ASAP
Conclusion

• beware the arthroplasty joint and needles

• shoulder dislocations require evidence of reduction

• …why would you NOT use fluoroscopy for any reduction if available???