



**More** Exceptional Care, **Still** Exceptionally Close.

# COMMON HIP AND KNEE PROBLEMS

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WARREN GENERAL

AHN

LECOM  
HEALTH

# My Background

- ▣ Oil City PA →
- ▣ Gannon University →
- ▣ West Virginia School of Medicine →
- ▣ Univ of Rochester Orthopaedic Surgery →
- ▣ Cleveland Clinic and Metro Health (Fellowship training in shoulder to hand surgery) →
- ▣ Warren General



# What we DO?

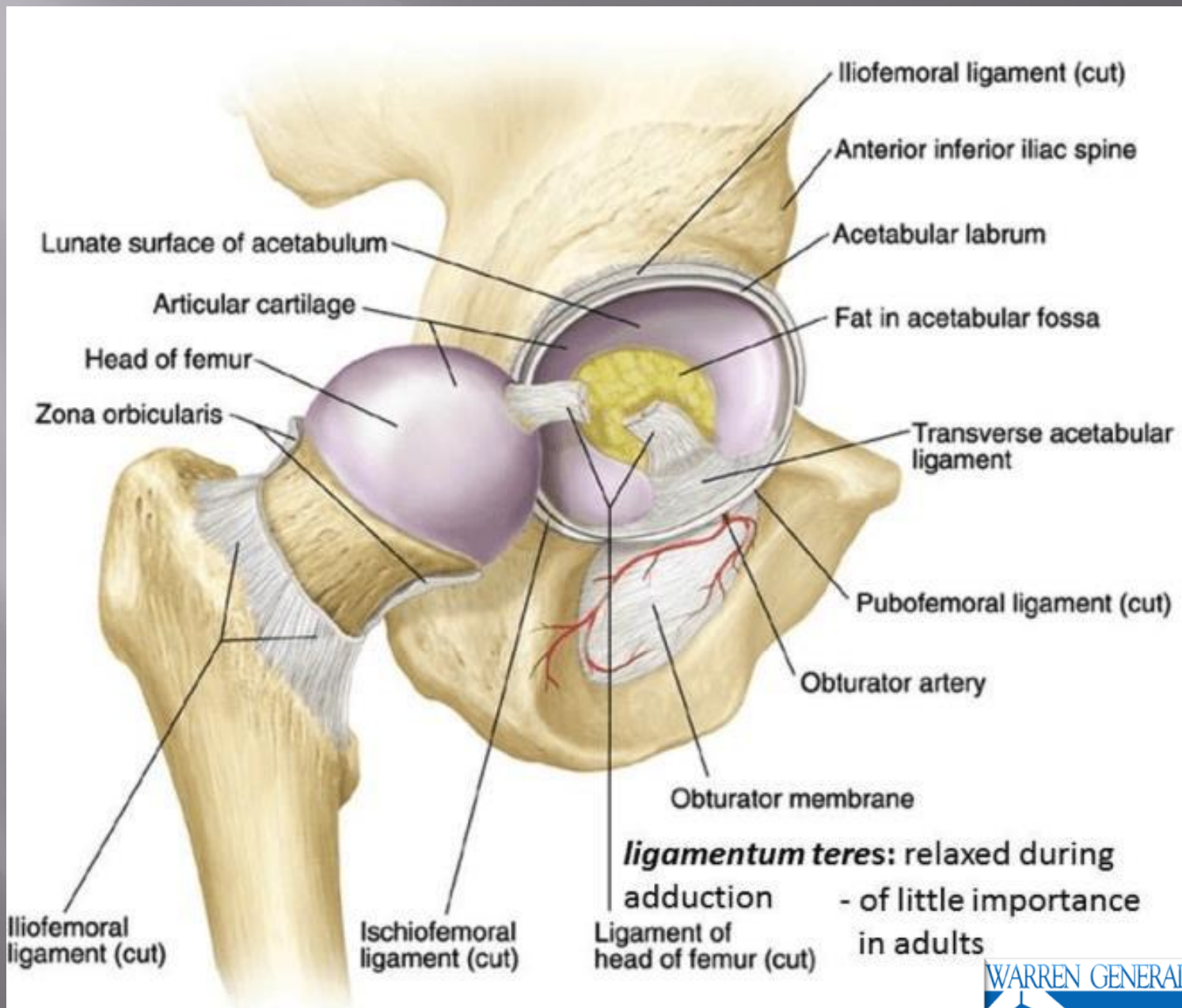
- ▣ Operative and non-operative management of musculoskeletal problems
  - Not just surgery
- ▣ Fractures/trauma (ED)
- ▣ Arthritis
- ▣ Nerve compression syndromes
- ▣ Sports medicine
- ▣ Pediatric ortho
- ▣ Deal mainly with the extremities
  - Also treat non-operative spine

# Outline

- ▣ Hip pathologies
  - Trauma/fractures
  - Bursitis
  - Arthritis
  - Lower back issues/sciatica
- ▣ Knee pathologies
  - Ligament injuries
  - Mensicus issues
  - Arthritis

# Hip Anatomy

- ▣ Ball and socket joint
- ▣ Inherently stable
  - Majority from boney anatomy
  - Augmented by labrum/capsule
- ▣ Femoral head and acetabulum



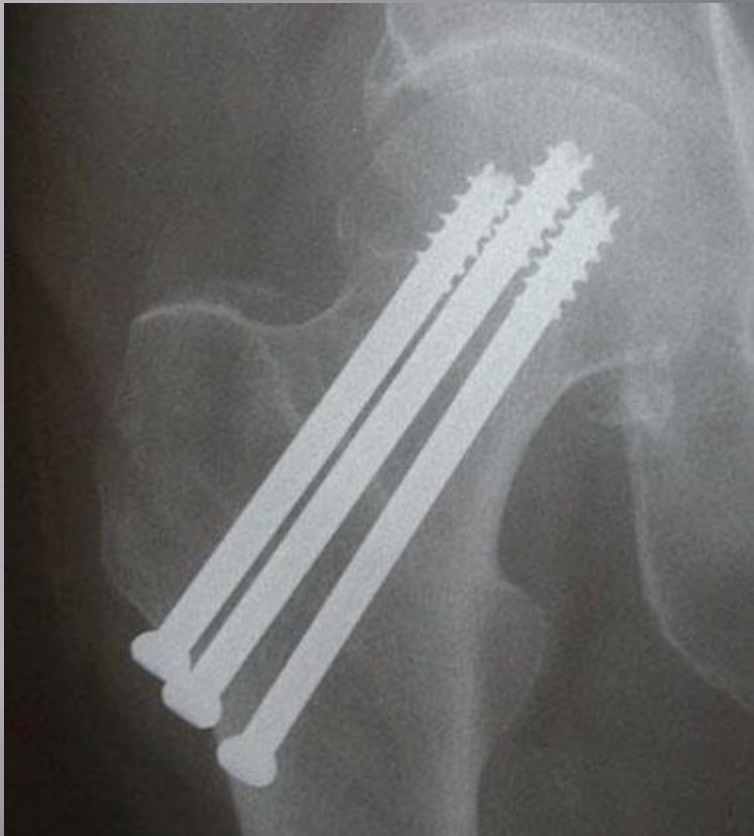
# Hip Fractures

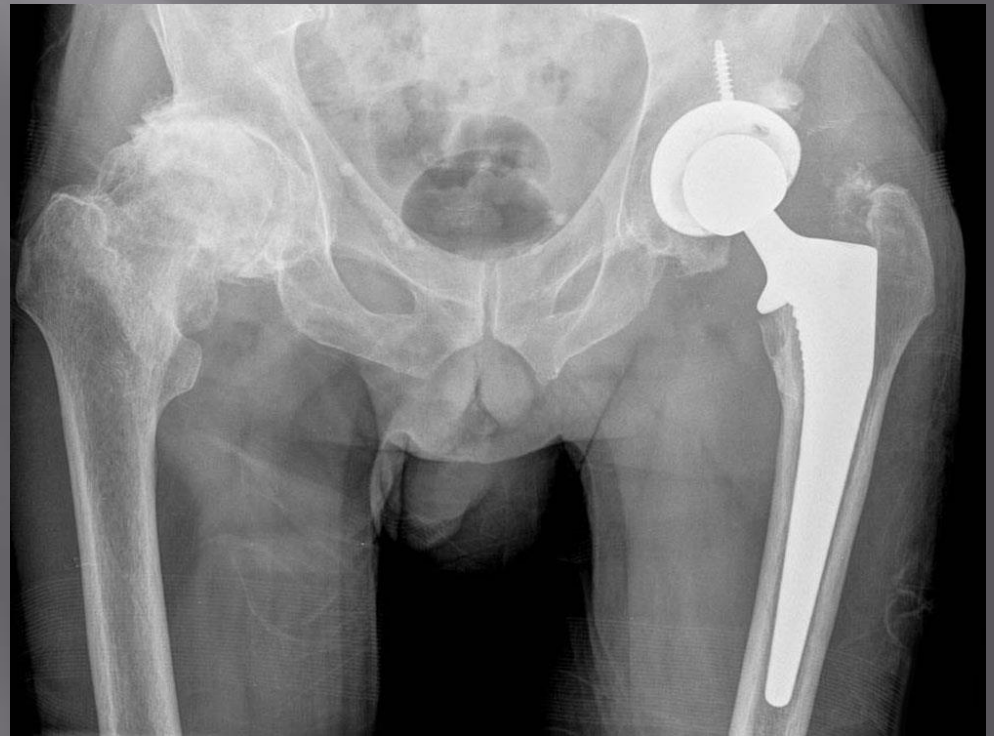
- ▣ “hip” fractures can occur in multiple locations in proximal femur
  - acetabulum
  - Head
  - Neck
  - Intertrochanteric
  - Subtrochanteric
- ▣ Increasingly common with aging population
- ▣ Women > Men



# Hip Fractures

- ▣ Most expensive fracture to treat
- ▣ Occur with high energy in the young and low energy in the old (fragility fracture)
- ▣ Have significant impact of mortality and quality of life
- ▣ 25-30% mortality rate at one year following hip fracture in elderly
  - Pre-operative function most predictive of post-op survival
- ▣ Fix almost all of them- there is no good way to “immobilize” hip and treat conservatively
- ▣ Goal is to fix/replace ASAP to permit early mobilization





# Trochanteric Bursitis

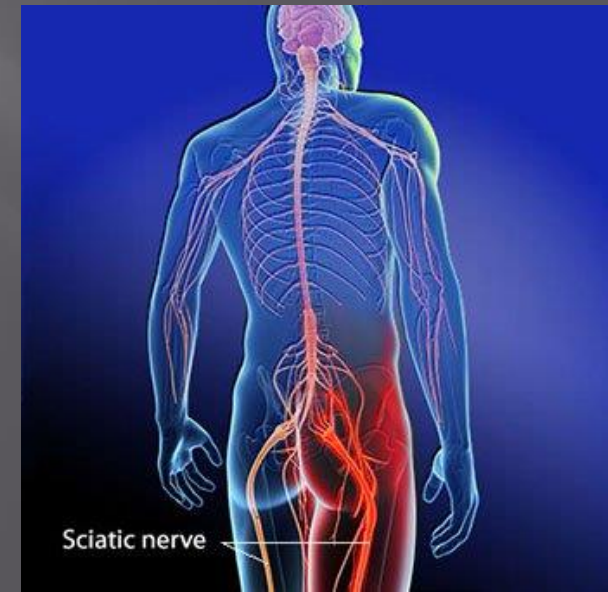
- ▣ Very common cause of lateral hip pain
- ▣ Inflammation of bursa overlying greater trochanter
- ▣ Majority of time improves with non-op care
  - NSAIDs
  - Corticosteroid injection
  - Stretches/PT
  - Time

# Trochanteric Bursitis



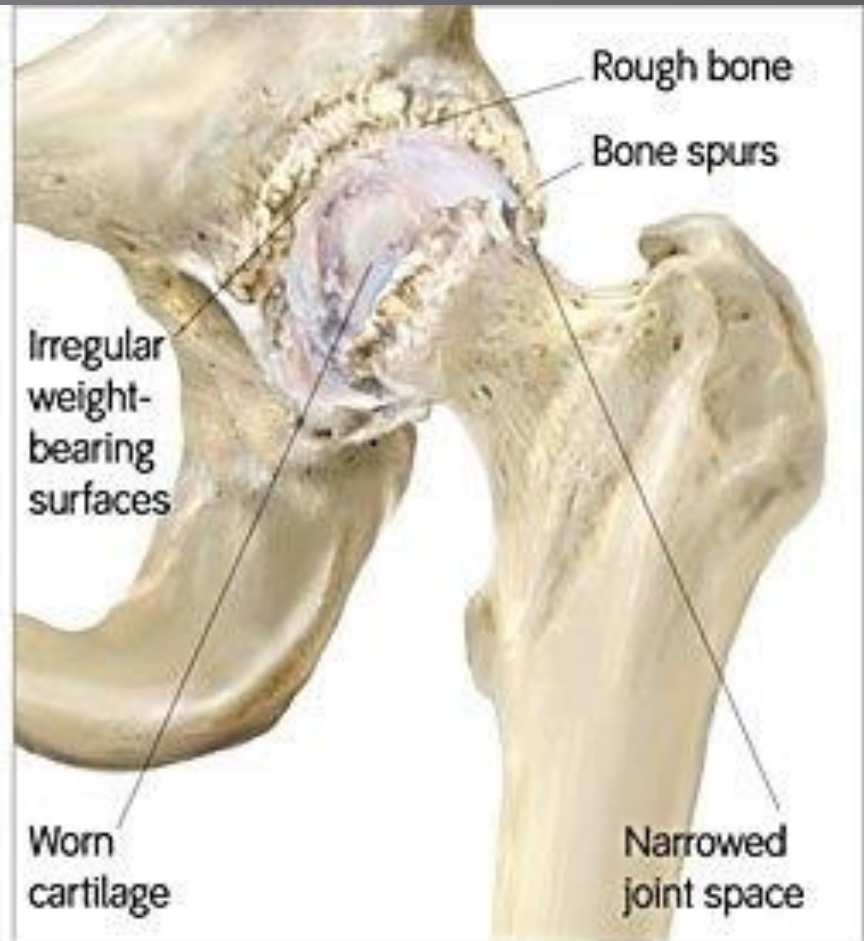
# Sciatic/Lower back issues

- Very common cause of posterior hip pain
- Radiating leg pain
- Numbness/weakness
- 80% will improve with treatment and time



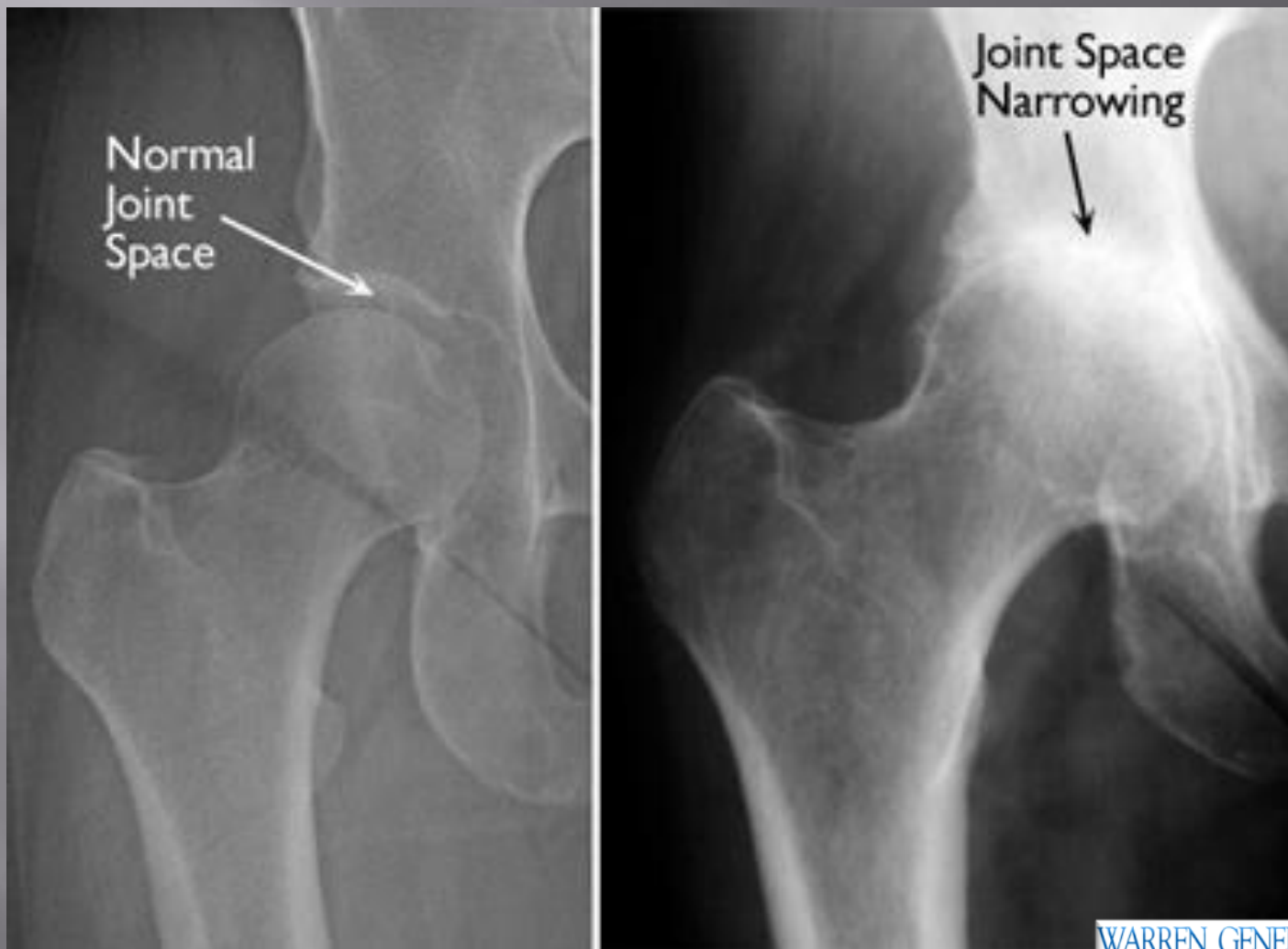
# Hip Osteoarthritis

- ▣ “Degenerative disease of joints that causes progressive loss of articular cartilage”
- ▣ Probably caused by combination of genetics and “wear and tear”
- ▣ Females > males
- ▣ Common in aging population
- ▣ Presentation
  - Progressive pain without injury
  - Usually located in groin
  - stiffness





# Hip Arthritis



# Hip Arthritis Treatment

- ▣ NSAIDS
  - First line treatment for symptomatic arthritis
- ▣ Weight loss, activity modification
- ▣ Steroid injection
  - Usually done with image guidance
- ▣ AVOID narcotics
- ▣ Total Hip replacement
  - Gold standard treatment if failing conservative treatment
  - There is no role for partial hip replacements for arthritis

# Weight Loss

- ▣ One of the non surgical treatment options for arthritis with the most scientific support
- ▣ Decreased weight=decreased load on joint→ decrease symptoms→ possibly slow progression of disease

# My Joint Replacement Algorithm

- ▣ 1. Good candidate
  - Healthy (enough)
  - Appropriate age- > 50 or preferable > 60
  - No significant obesity
  - Non smoker
- ▣ 2. Significant arthritis on xray
- ▣ 3. Failed all other treatment options
  
- ▣ 3/3 usually means a great outcome

# Surgery – total hip replacement

Cuts



Implant components



Implanted



# Hip Replacement Risks

- ▣ Infection= disaster
  - < 1%
  - Treated with repeat surgery, possible implant removal
  - Smoking, obesity increase risk
- ▣ Dislocation
  - 1% if surgery performed well
  - 6 weeks of precautions after surgery to prevent
  - Higher in patients with neurologic diseases (Parkinsons), poor cognition, drug/alcohol abuse

# Hip Replacement Risks

- ▣ Fracture around implant
  - Intra-op- 2-3%
  - Post-op- 0.1%

# Hip Replacement

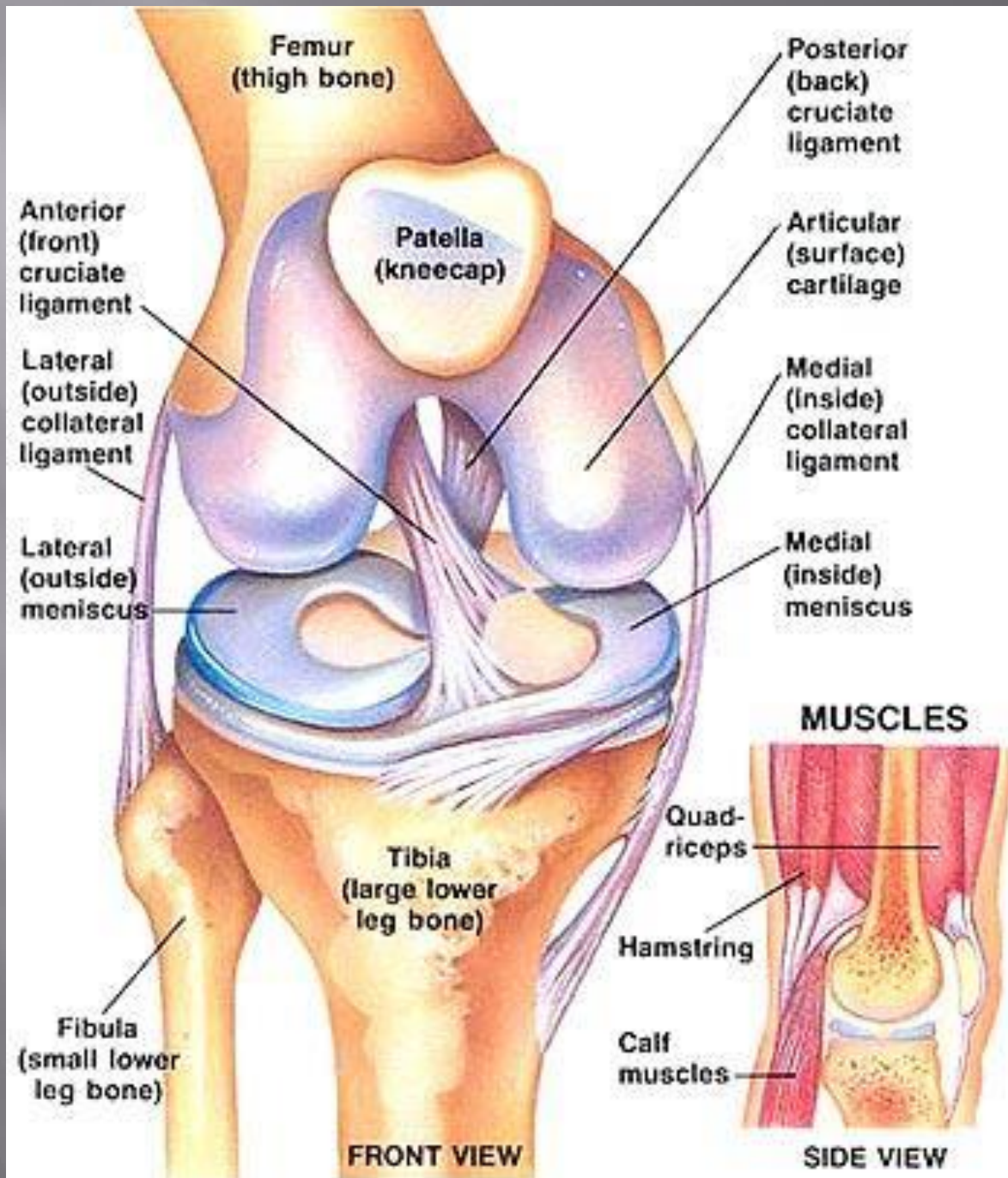
- ▣ If performed in the right patient for the right reasons, hip replacements are LIFE CHANGING
- ▣ Last around 20 years (maybe more)





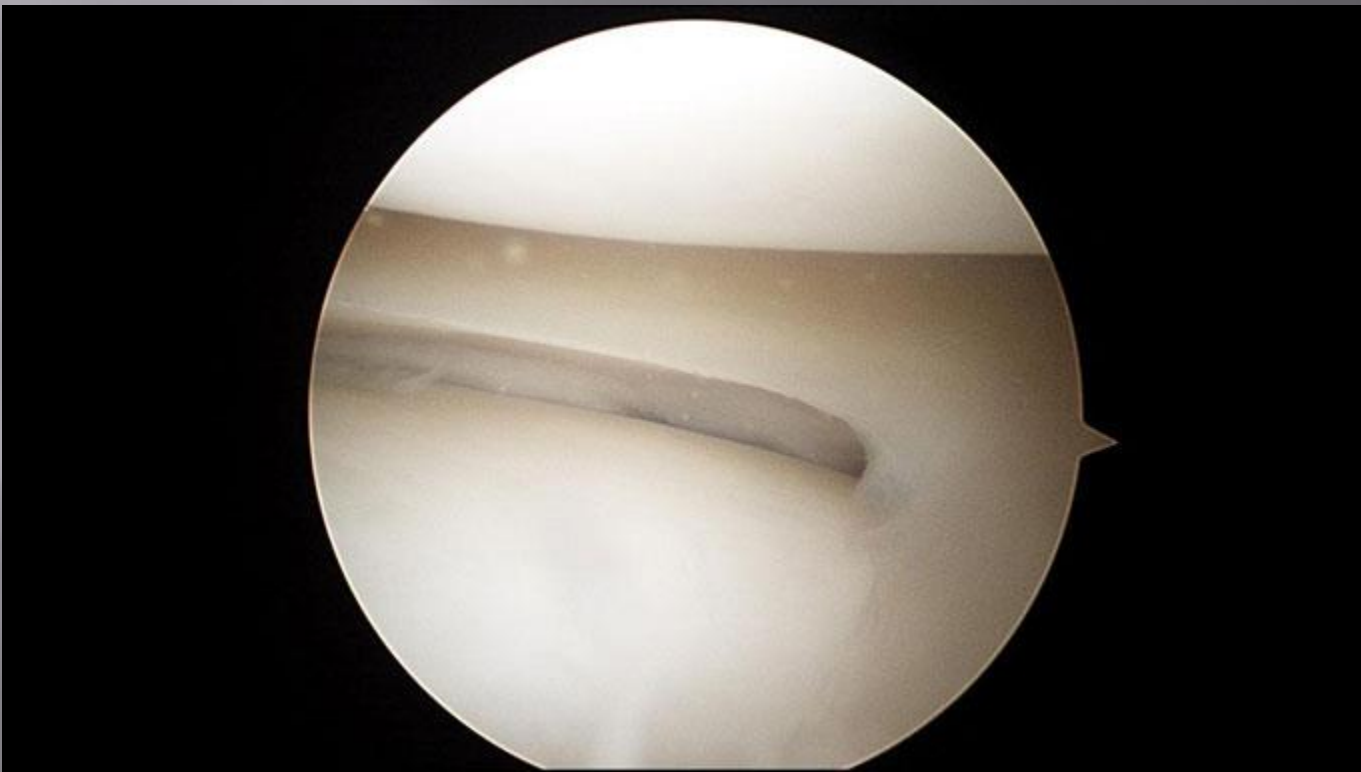
# Knee Anatomy

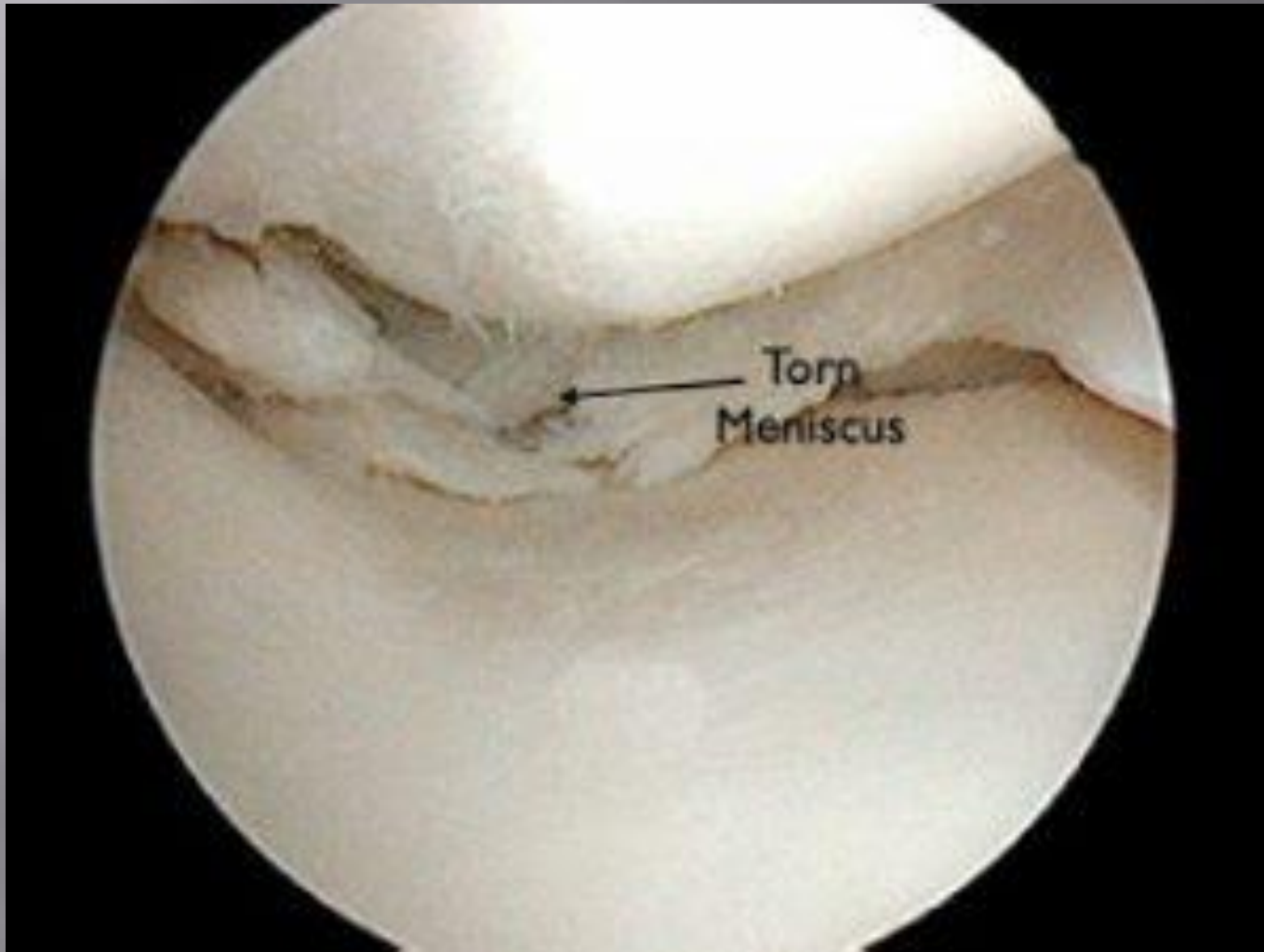
- ▣ Joint made up of articulations between femur, tibia, patella
- ▣ Main ligaments of the knee include cruciate (ACL, PCL) and collateral (MCL, LCL) ligaments
- ▣ Common injuries can include ligament injuries, cartilage damage or meniscus tears



# Meniscus Tears

- ▣ Very common
- ▣ Can be seen in healthy knees with traumatic injury or may be associated with arthritis
- ▣ Symptoms can include pain along joint lines, clicking, locking or mechanical symptoms
- ▣ Common treatments include conservative care with rehab, injections vs arthroscopic surgery (debridement vs repair)





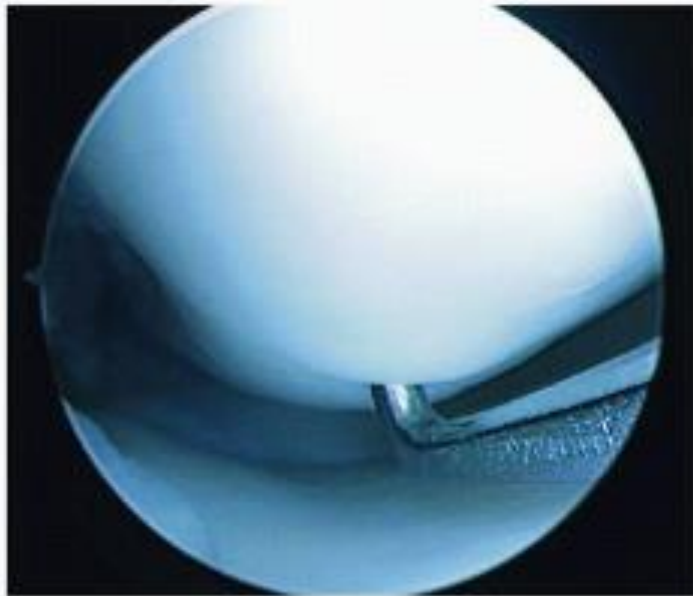


# Knee Osteoarthritis

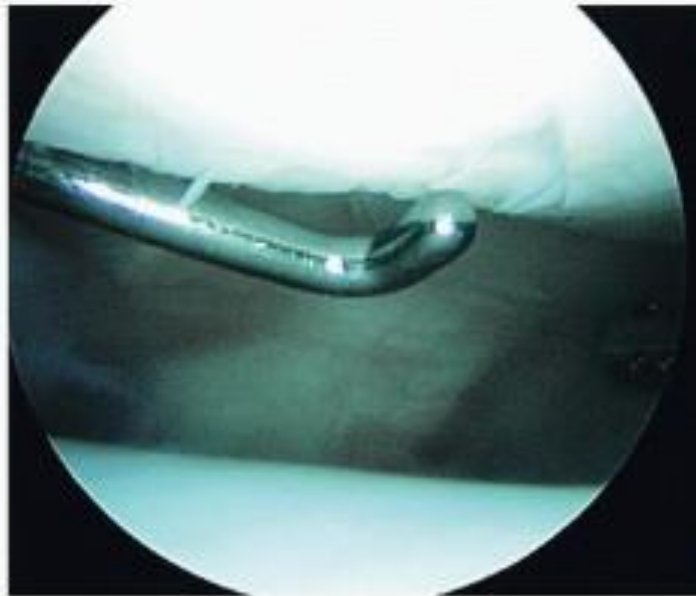
- ▣ More common than hip arthritis
- ▣ Similar treatment strategies
  - NSAIDs
  - Weight loss/activity modifications
  - Injections
    - ▣ Also can consider viscosupplementation shots
  - AVOID narcotics
  - Partial vs total knee replacement
  - Knee arthroscopy has limited role in treatment for arthritis
    - ▣ The more advanced arthritis=shorter duration of symptom relief



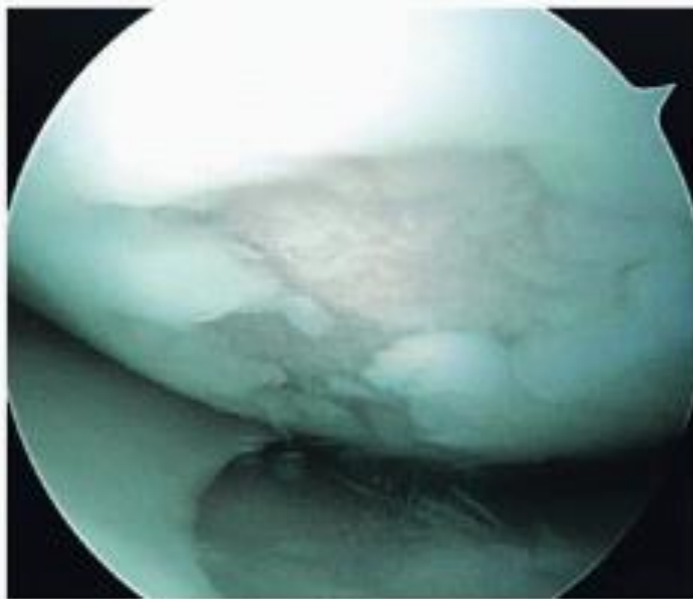




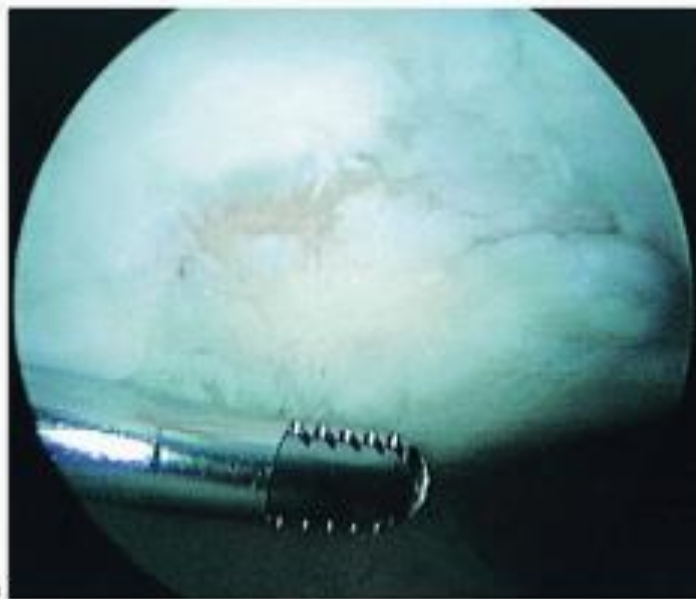
A



B



C



D





# Partial Knee Replacement

- Only appropriate for a minority of patients with arthritis (5-10%)
- Criteria
  - Arthritis in only one compartment
  - Near normal ROM
  - Near normal alignment
  - Intact ligaments
  - Lack of pain in other compartments
- Concern is failure and need for conversion to total knee



# Total knee replacement



Degenerative knee

Cuts

Implant components

Implanted

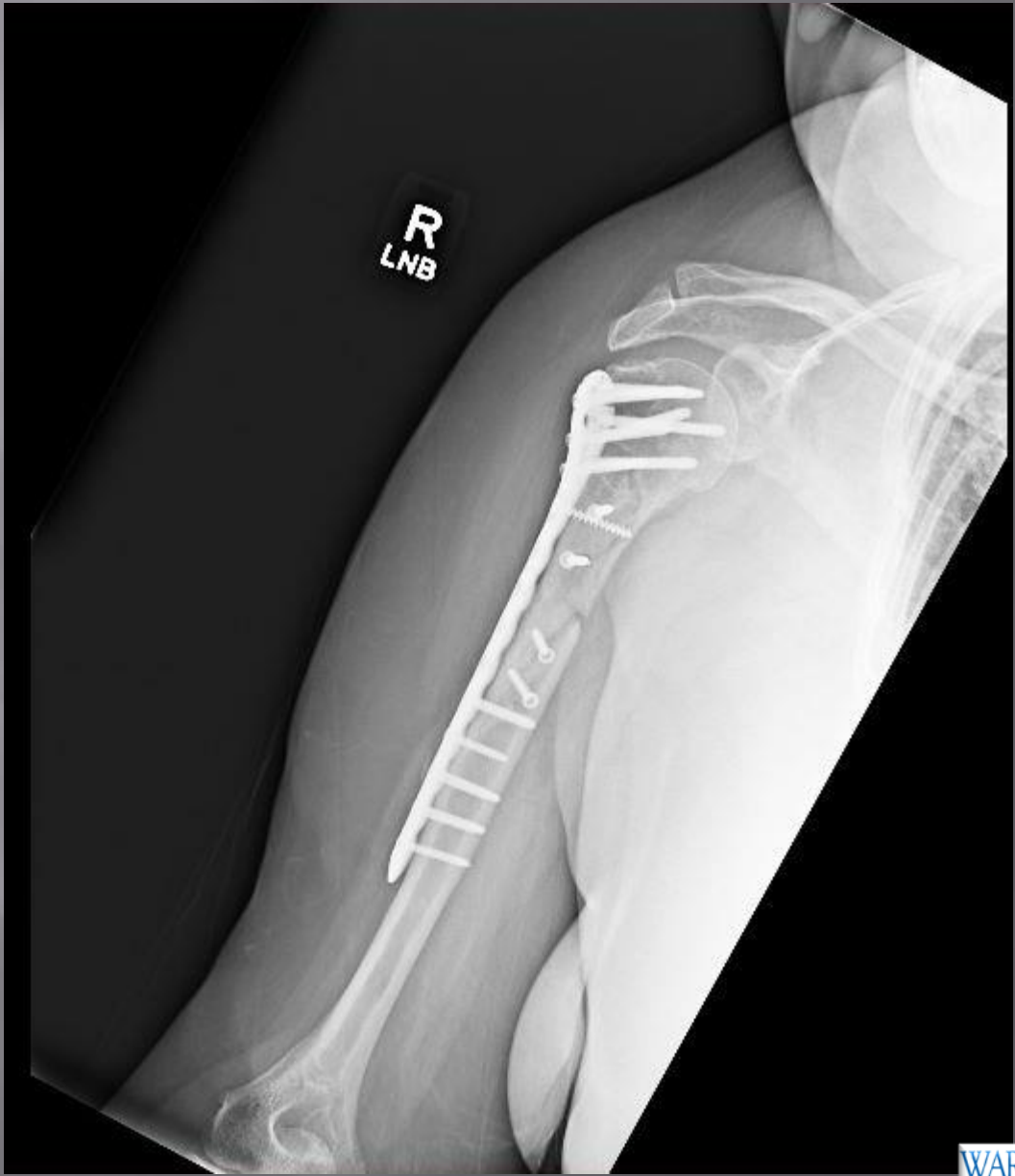
# Total Knee Risks

- Infection (1%)= disaster, need for component removal
- Nerve/vessel injury- less than 1%, very uncommon
- Improper balancing/ligament laxity
- Stiffness (5%)
- Continued pain (up to 10%)- more common than in total hips
  - Pain tolerance
  - Muscle/tendon inflammation
  - design
- A well performed knee replacement in the right patient has excellent and life changing results

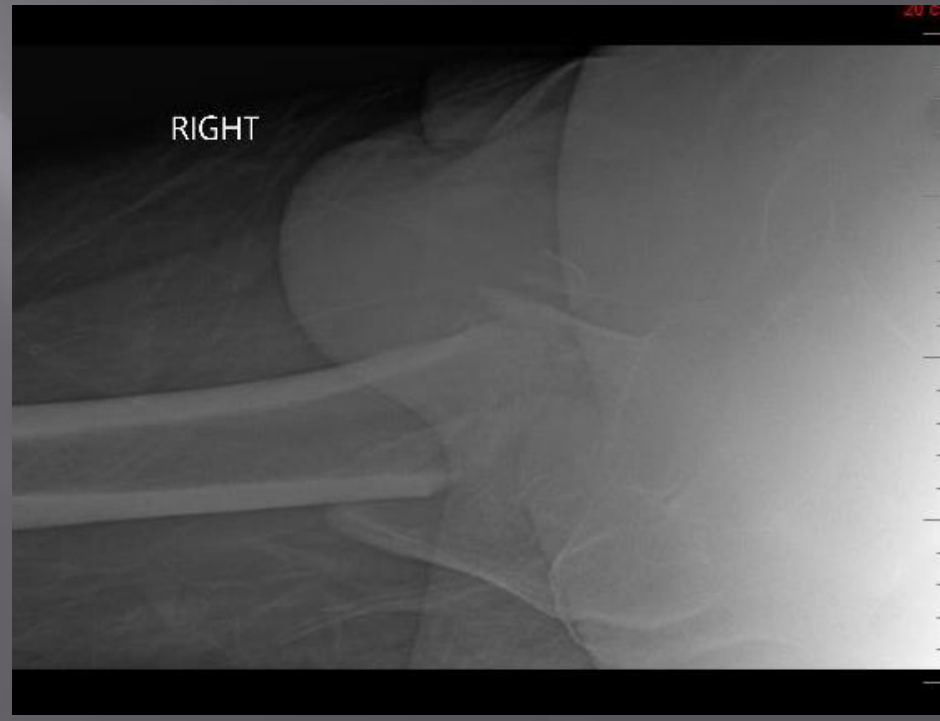
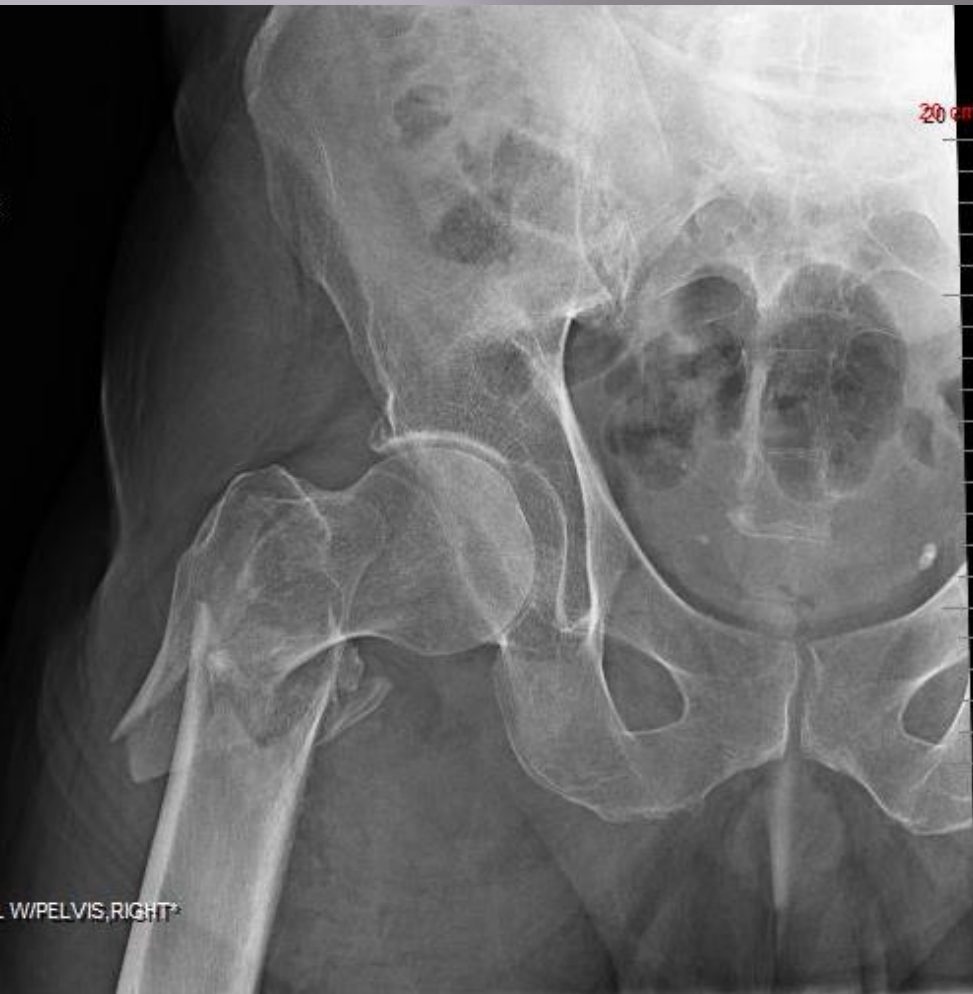


# Trauma





# Trauma





# Rotator Cuff Tear Arthropathy



R  
CW

RIGHT



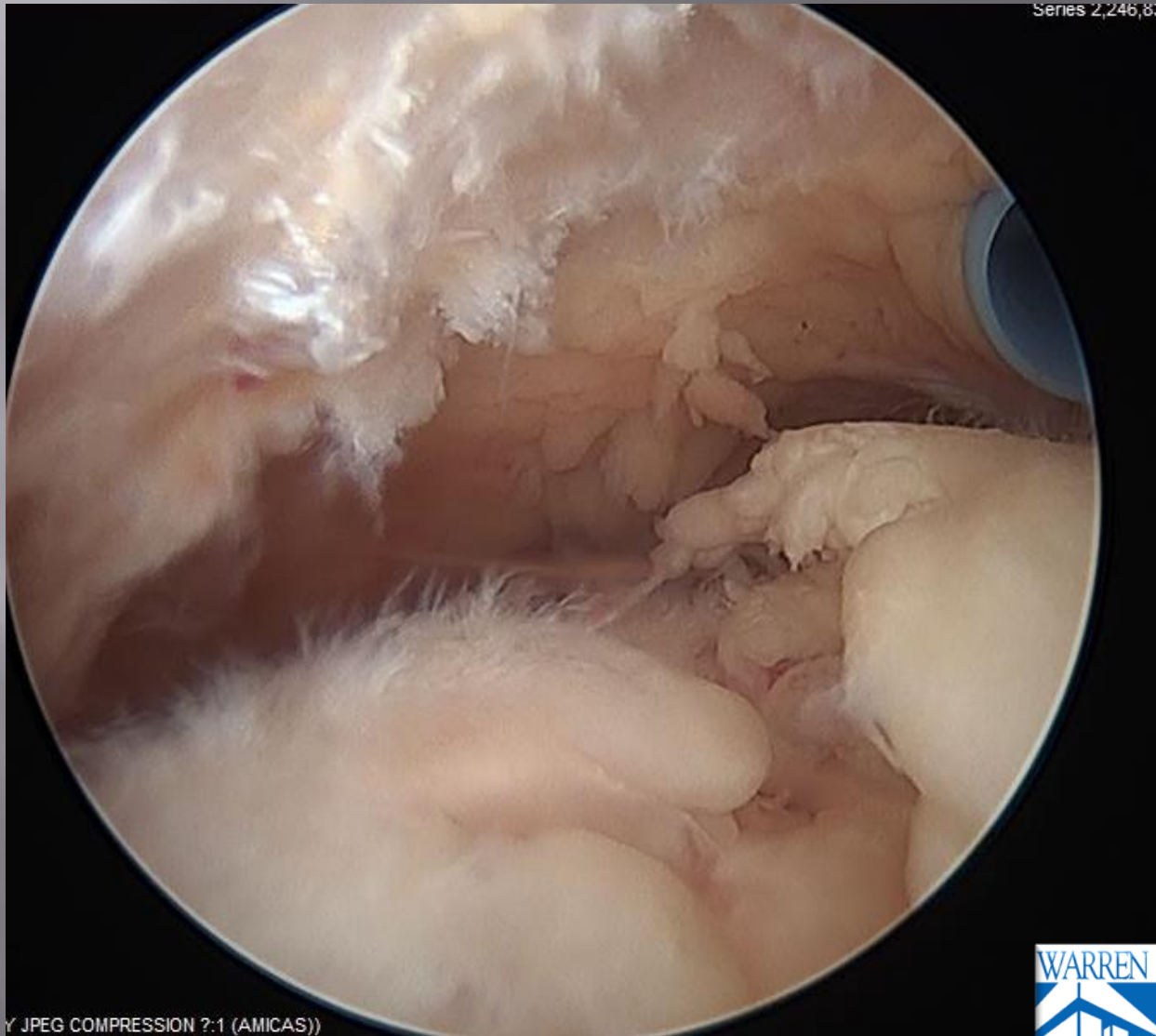
# Shoulder Arthritis







# Rotator Cuff Repair





# Warren General Dept of Surgery

- ▣ Current chief
- ▣ Low infection rate
- ▣ Excellent staff/resources
- ▣ Excellent Care with good proximity to home
- ▣ Keep business in town

# Questions

