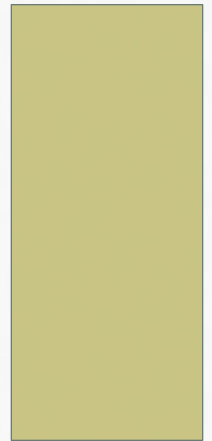


# MINIMALLY INVASIVE TOTAL HIP REPLACEMENT

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# INTRODUCTION

- Hip arthritis affects hundreds of thousands of people each year
- Many people suffering from arthritis alter their lives to deal with pain

# SIGNS AND SYMPTOMS

- Groin pain
- Thigh pain
- Stiffness
- Decreased motion
- Pain often worse in morning or after sitting for long periods of time

# RISK FACTORS

- Obesity
- Occupation
- Trauma
- Female
- Older age
- Family history
- Congenital
- Previous hip infection



# NONSURGICAL TREATMENT

- Medications
  - Anti-inflammatories
    - Avoid with heart, stomach or kidney problems
  - Glucosamine and chondroitin
  - Tylenol
  - Narcotics



# NONSURGICAL TREATMENT

- Weight loss
  - Hip joint feels 3-4x body weight with walking
  - 5x body weight with running
- Steroid Injections
  - X-ray guidance



# NONSURGICAL TREATMENT

- Physical Therapy
  - Low impact activities
- Assistive Devices
  - Cane in opposite hand
  - Walker



# TOTAL HIP REPLACEMENT

- Goals
  - Reduce hip pain
  - Improve motion
- 345,000+ in the United States each year





# ANATOMY OF THE HIP

- Ball and socket joint
  - Femoral head
  - Acetabulum



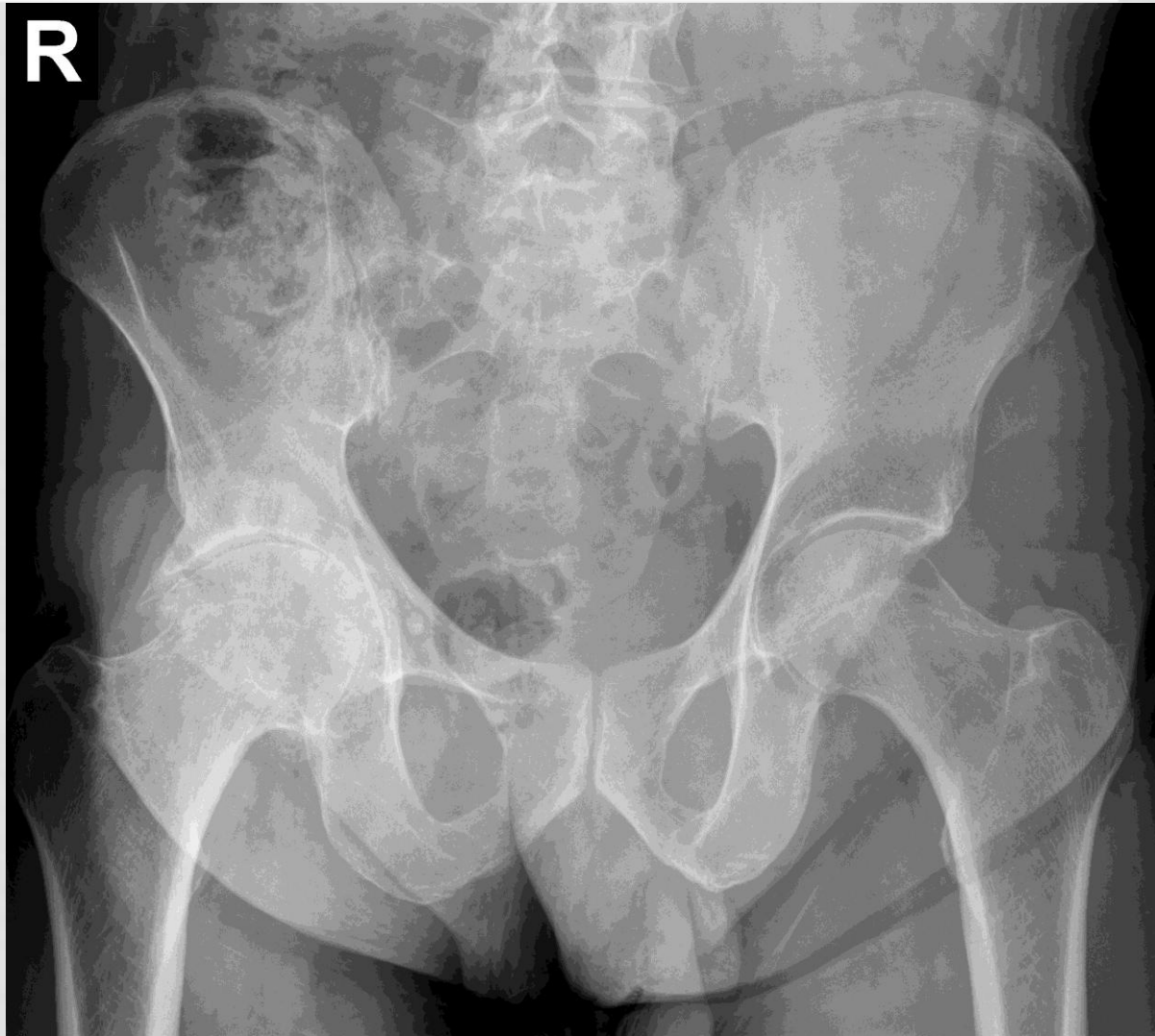
Anatomy of the Hip



Arthritic Hip

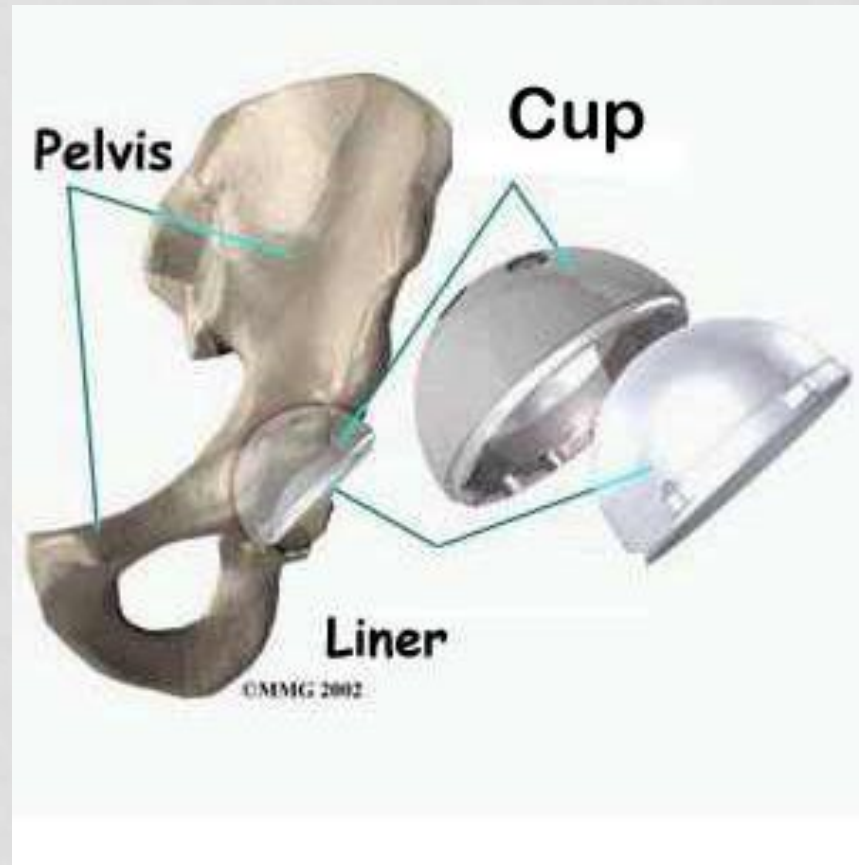
# X-RAY FINDINGS

- Decreased joint space
- Hard bone
- Bone cysts
- Bone spurs



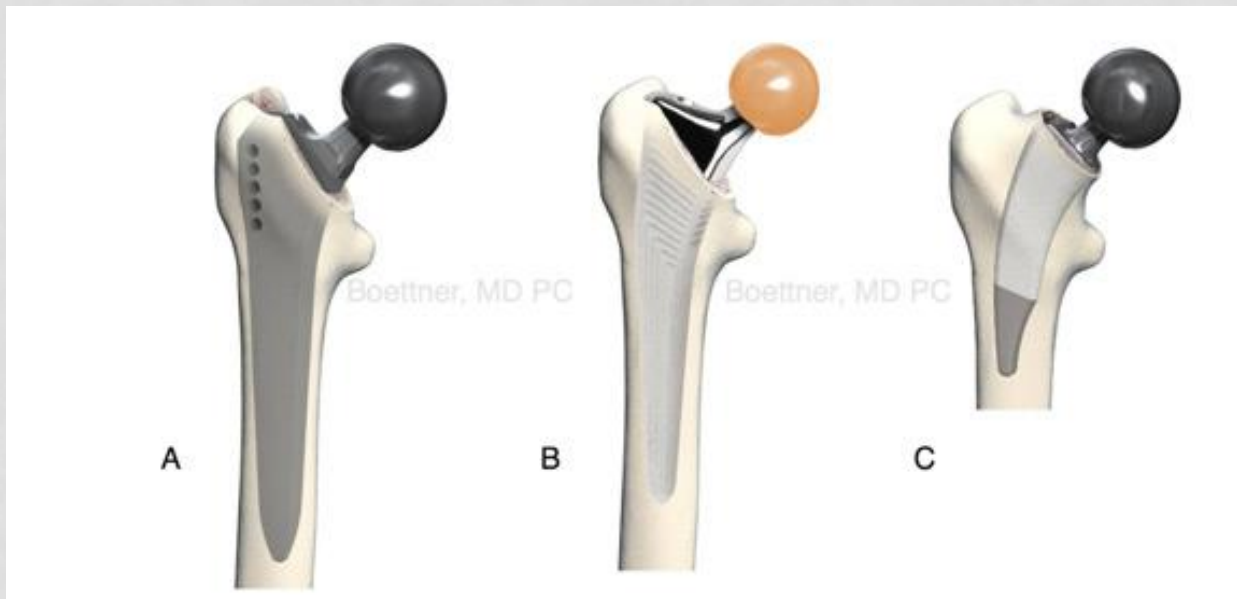
# TOTAL HIP REPLACEMENT

- Socket component
  - Metal cup
  - Plastic liner



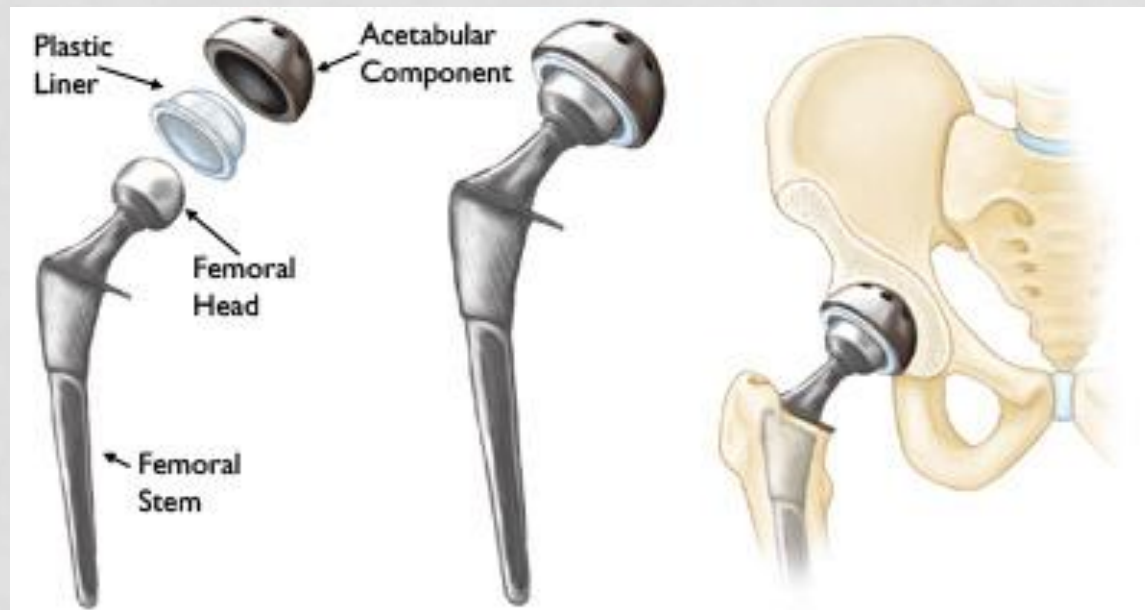
# TOTAL HIP REPLACEMENT

- Ball component
  - Metal stem
  - Metal or ceramic head



# TOTAL HIP REPLACEMENT

- One of the most successful orthopedic surgeries
- Hip replacements can last 20+ years



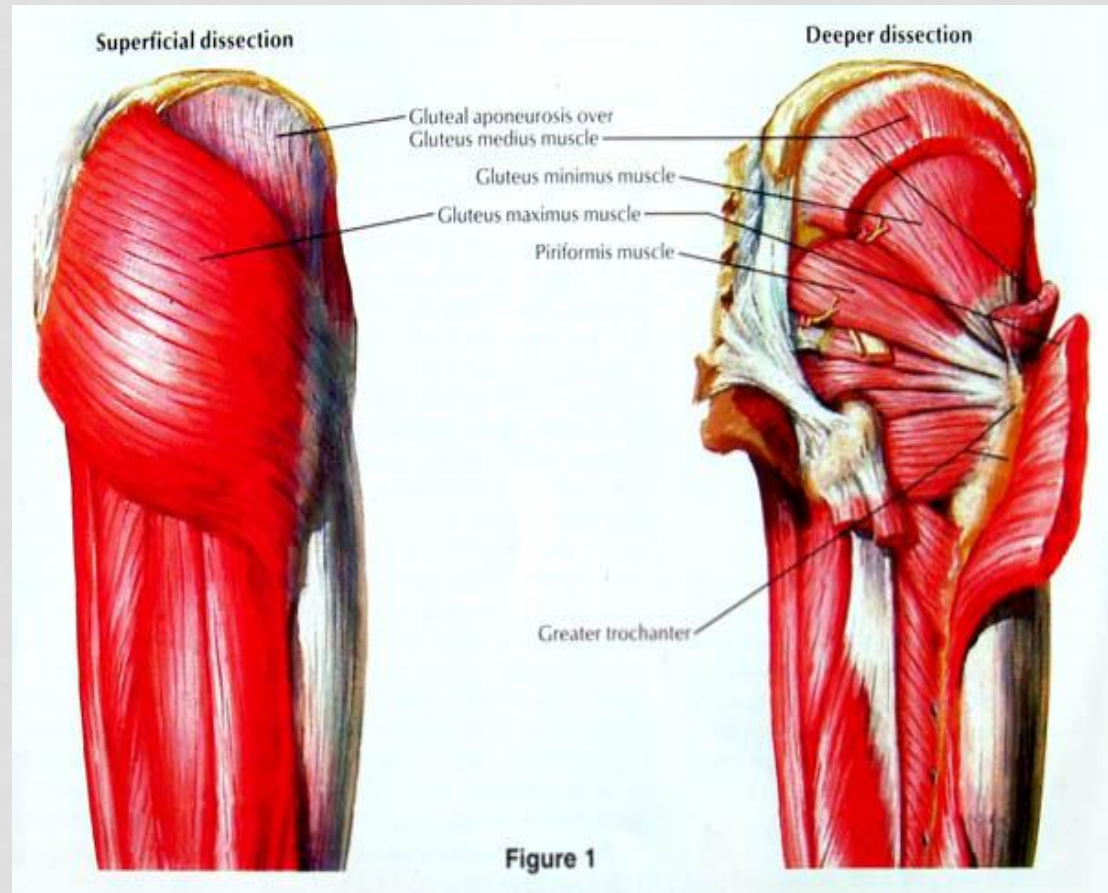
# TRADITIONAL APPROACH

- The Traditional Approach
  - Posterior
  - Large incision
  - Detach muscles from bone
  - Surgeon relies on feel
  - Check length in recovery room



# TRADITIONAL APPROACH

- Dissection through tissue and muscles important for the stability of the hip



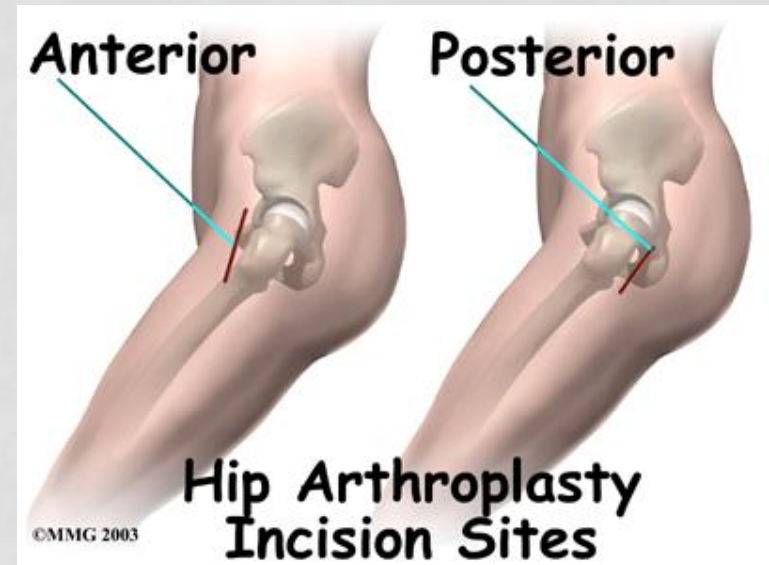
# TRADITIONAL APPROACH

- Risk of hip dislocation
- Limited movement
- Can have long lasting muscle weakness and limp
- Need canes and walkers for longer
  - 6 weeks
- More pain medications



# MINIMALLY INVASIVE APPROACH

- Minimally Invasive Approach
  - Anterior
  - Split between the muscles
  - No muscle detachment
  - Less trauma
  - Smaller incision
  - Use x-rays during surgery



# MINIMALLY INVASIVE APPROACH

- The hip is exposed by going in between the muscles
- Muscle sparing



# MINIMALLY INVASIVE APPROACH

- Special orthopedic table called the HANA table



# MINIMALLY INVASIVE APPROACH

- X-rays during surgery
- Proper placement and size of components
- Leg lengths



# MINIMALLY INVASIVE APPROACH

- Very low risk of dislocation
- No motion limitations after surgery
- Less trauma and smaller incision → less pain and faster rehabilitation
- Use canes and walkers for less time
  - 2 weeks
- Less pain medications



# POSTOP EXPECTATIONS

- Immediately
  - Walking same day as surgery
  - 2 nights in hospital
  - Normal arthritis pain is gone
  - Walker
  - Home therapy vs outpatient therapy



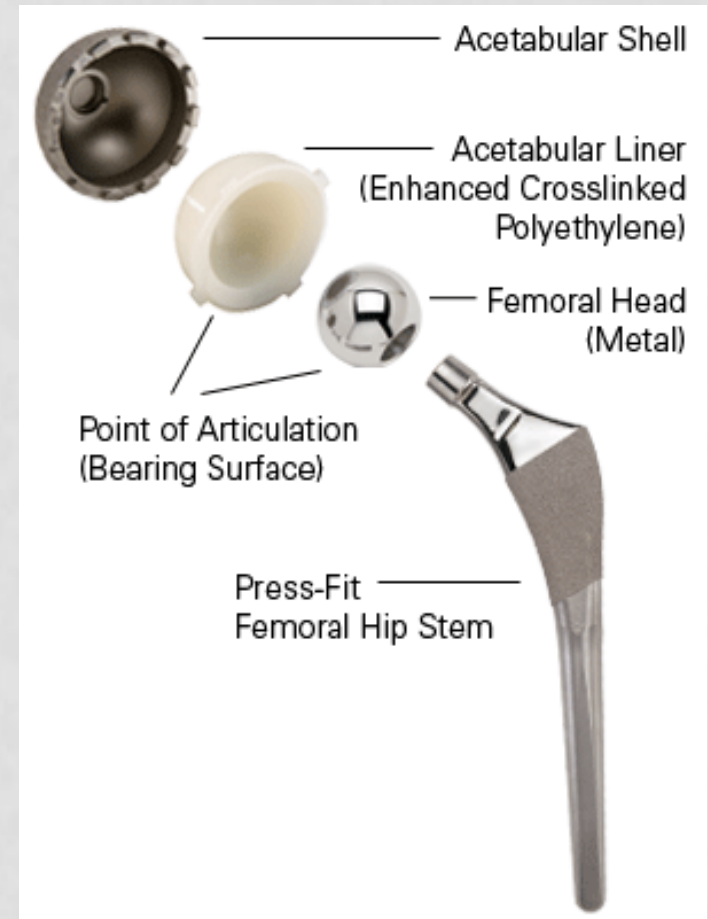
# POSTOP EXPECTATIONS

- 2 weeks
  - Cane
  - Off pain medications
  - Starting outpatient therapy
- 2 months
  - Normal activities
  - Increasing endurance
- 4 months
  - Back at it



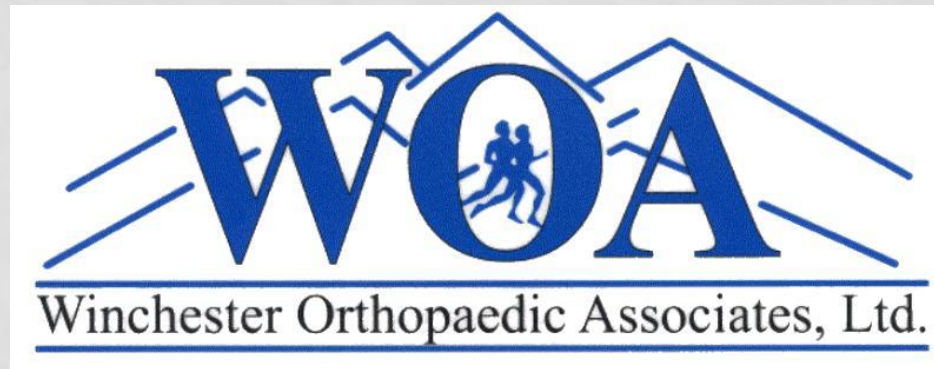
# MINIMALLY INVASIVE VS. TRADITIONAL

- Minimally Invasive
  - Less muscle damage
  - Less postoperative pain
  - Faster recovery
  - Better walking
  - Shorter hospital stay
  - Equal function at 6 months





THANK YOU



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# QUESTIONS?

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