MINIMALLY INVASIVE TOTAL HIP REPLACEMENT

ORTHOPAEDIC SURGERY
WINCHESTER ORTHOPAEDIC ASSOCIATES
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
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

540-667-8975
Abbey K.I. Gore, M.D.
QUESTIONS?


