

Introduction to Direct Anterior Hip Replacement

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Objectives

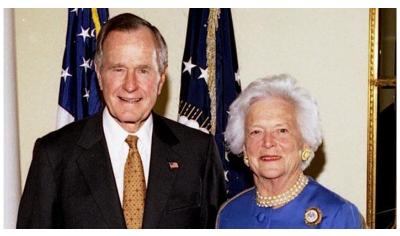
- Review the background of arthritis and joint replacement
- Review treatment alternatives
- Introduce surgical concepts of direct anterior total hip arthroplasty
- Answer all questions



Familiar Faces







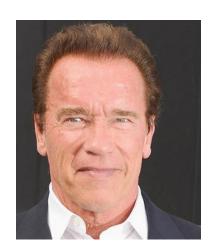














Arthritis Prevalence

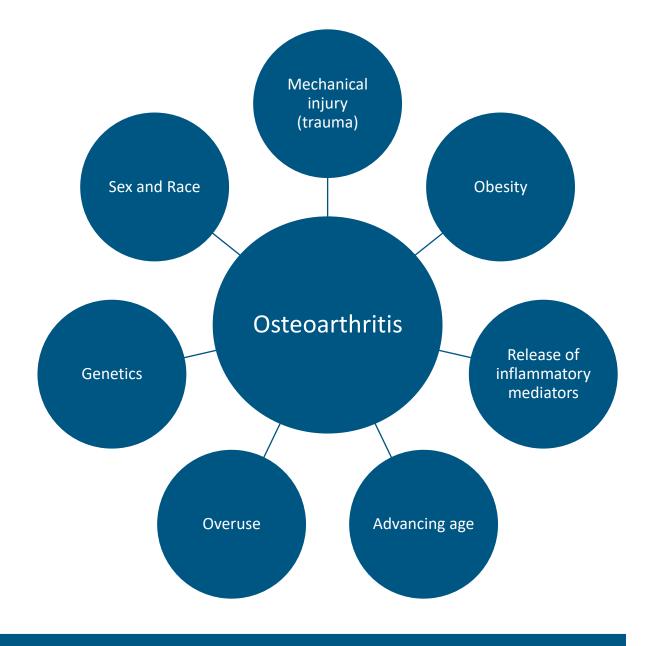
- As many as 91 million Americans affected (all types)
- 31 million affected by osteoarthritis (OA)



Osteoarthritis

Multifactorial disease of joints

- Abnormal anatomy
- Abnormal biology
- Overuse
- Genetics





Normal Functioning Joint

- Healthy cartilage
- Well-lubricated
- Full motion
- Pain free





Osteoarthritic Joint

- Damage to cartilage
- "Bone on bone"
- Loss of lubricating mechanism
- Loss of motion
- Pain





Diagnosis

- Medical History
- Physical Exam
- X-rays





Normal Hip

- Well-maintained joint space
- Smooth joint surfaces
- No bone spurs





Arthritic Hip

- Loss of joint space (bone on bone)
- Bone cyst
- Bone spurs
- Dense white bone (sclerosis)





Treatment of Osteoarthritis

- Patient education
- Weight reduction
- Activity modification
- Medication
- Cane or ambulatory aid
- Surgery



Weight Reduction

- Hip experiences forces up to 4-6x body weight
- Less load on joints
- May "wear out" slower
- Safer surgery, less complications





Activity Modification

- Lower impact exercise
- Decrease symptoms
- Keeps you active







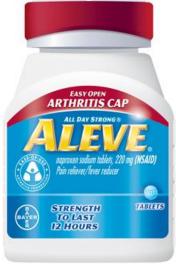
Medication: Anti-Inflammatories

- Many varieties
- Most effective class of medication
- Some topical forms
- Discuss with your physician











Medication: Injections

Steroid shot

- Anti-inflammatory
- No more than 3-4 per year
- Law of diminishing returns

Lubricating injections

- Single shot or series
- Variable pain relief
- Small chance of reaction

Stem cell/PRP

- o Variable pain relief
- Not shown to regrow cartilage
- Out of pocket expense







Medication: Supplements

- Glucosamine/Chondroi tin Sulfate
 - Does not grow new cartilage
 - May be anti-inflammatory
 - More effective in mild arthritis
 - Few side effects
 - Not FDA approved





Surgery

- Good joint replacement candidates
 - Not satisfied with non-surgical treatment
 - Medically optimized
 - Understand the procedure, risks, benefits and recovery



Goals of Surgery

- Relieve pain
- Improve mobility
- Return to more active/fulfilling lifestyle



Preparing for Surgery

- Evaluation by internist/primary care physician
 - May need subspecialist clearance
- Pre-op education class





What is a Hip Replacement?

Surgical procedure that removes and replaces

diseased joint surfaces with implants







Surgical Steps

- Expose the hip joint
- Remove the head
- Prepare the socket/femur
- Trial components ensure muscle balance and length correct
- Place final implants

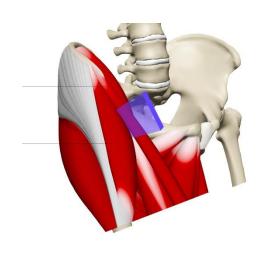




Anterior Approach

- What is it?
 - Incision made on front (anterior) of leg instead of the side or back
 - Surgeon works between muscles and does not have to detach them from the hip
 - Utilizes a special OR table,
 X-ray for precise
 positioning of implants

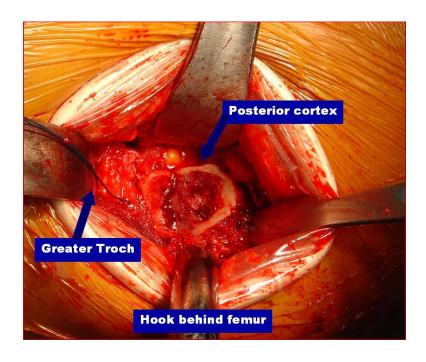








- Small incision
- Makes anatomic sense
- Less trauma to the body
 - Inter-muscular / Internervous plane
 - Abductors muscles not violated
 - Posterior capsular structures remain intact





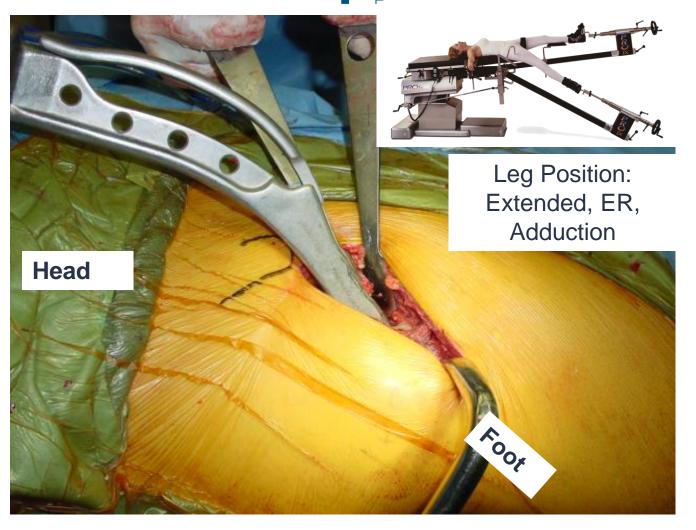
- Higher postoperative satisfaction
- Better postop functional scores
- Faster recovery
- Less restrictions postoperative



- Potentially less pain
 - Less need for medication
- Shorter hospital stay
- Potential for less complications
 - Potential for lower risk of dislocation

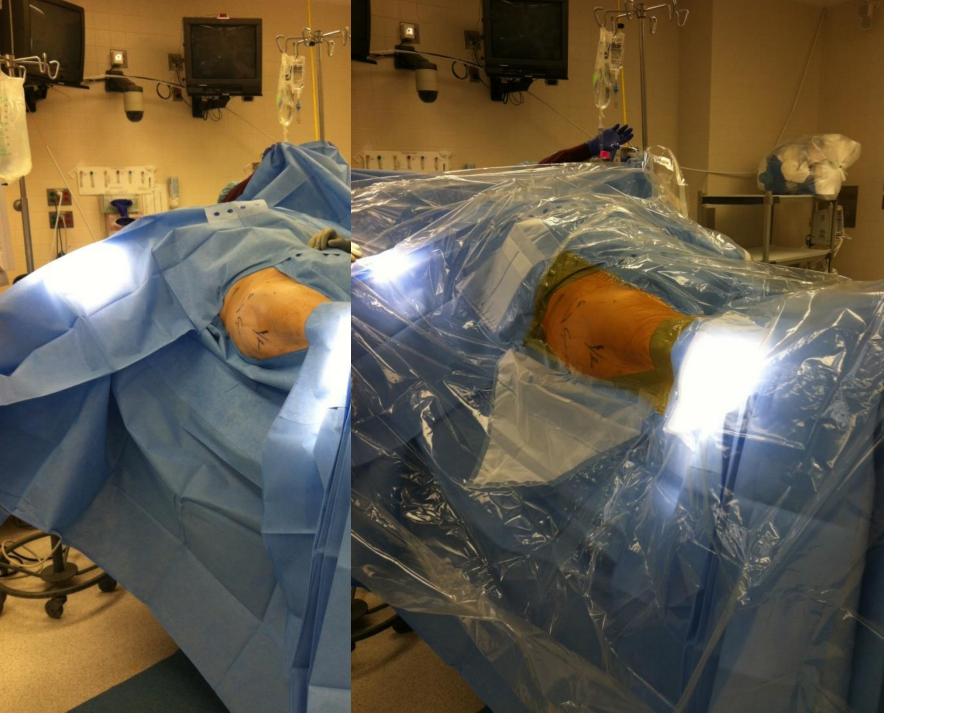


Reproducible positioning













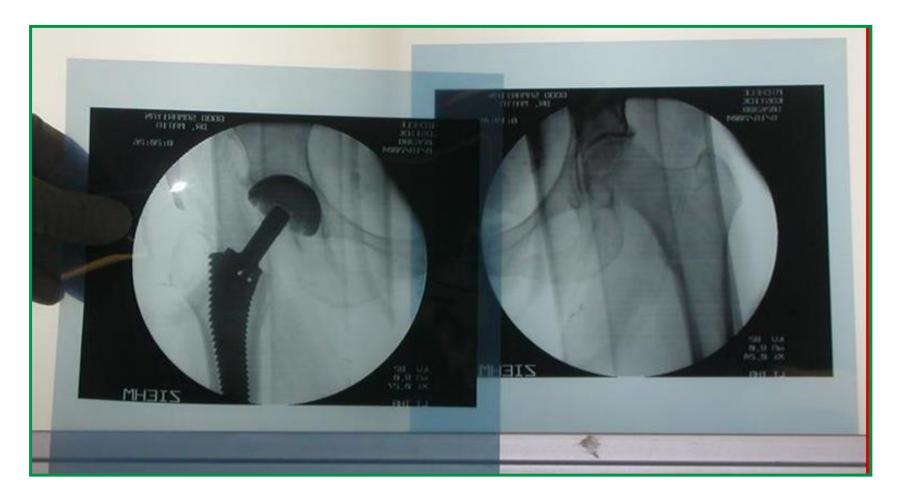


- Intraoperative X-rays
- Better cup positioning
- Improves femoral stem size and position
- More reliable recreation of anatomy







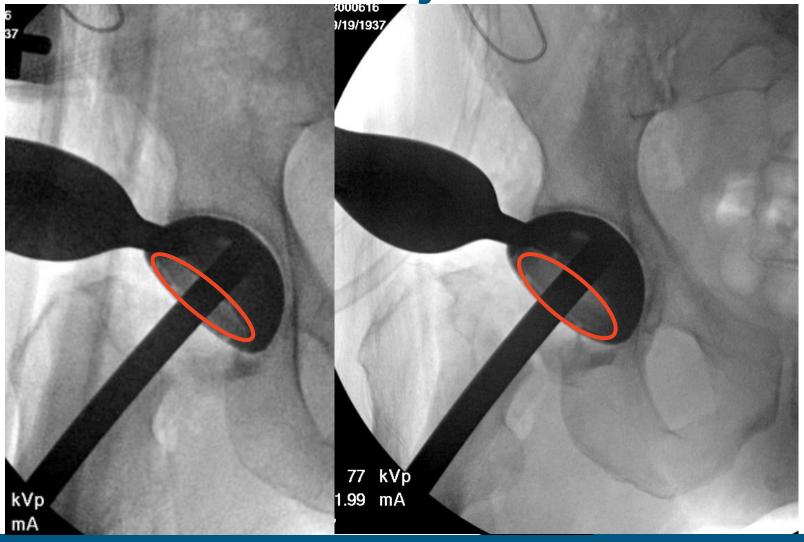








See it as I do it and adjust





What to Expect

- Out of bed on the day of surgery with therapy
- Immediate full weight bearing, no range of motion restrictions
- Progression of therapy as patient tolerates
- Some patients go home the day of surgery, others stay 1 night but most less than 24 hours
- Home with forearm crutches/walker transition to cane or no device over 1-2 weeks



What to Expect

- Waterproof dressing able to shower immediately
- Sutures typically underneath the skin dissolve on their own
- Comprehensive Rapid Recovery Program
 - Spinal with twilight sedation or general anesthesia with regional blocks
 - Precise surgery to minimize tissue trauma
 - Multi-modal pain program to decrease pain after surgery
 - Rapid return to exercise and activity



What Happens After 20 Years

- They do not fall apart at 21 years
- Most continue to function well
- 20-25 is a reasonable expectation
- Can wear out/loosen
- Revision can be done and good results can be achieved
- Roughly 0.5-1% of hip/knee replacements revised yearly
 - o At 10 years 90-95% survivorship
 - At 20 years 80-85% survivorship





Summary

- Very successful surgery
- Excellent long-term results
- Patients very happy
- Direct Anterior approach a good option for THA



Thank You

• Questions?



