

# Understanding Total Hip Replacement

**Brian J. White MD**

Orthopaedic Specialist in Disorders of the Hip  
Western Orthopaedics – Denver, Colorado



*Excellence in Motion*

# Introduction

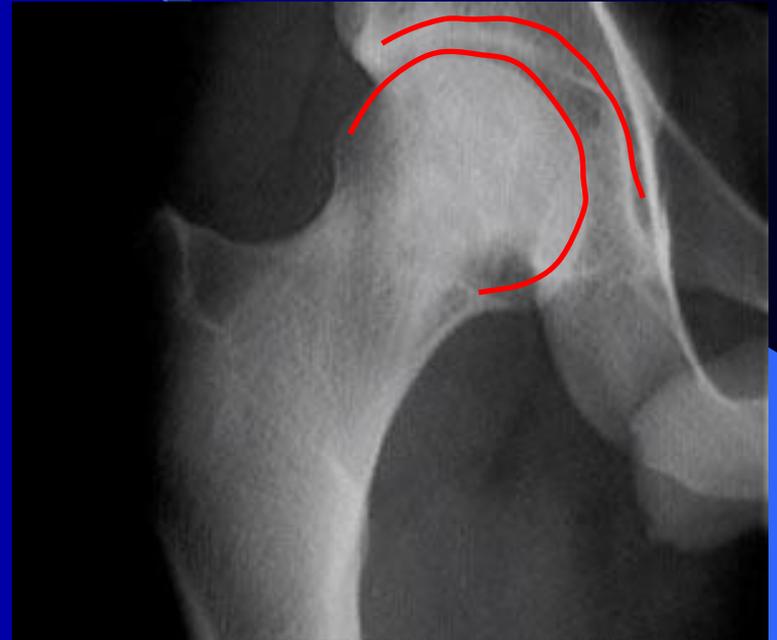
- This is designed to provide you with a better understanding of:
  - Anatomy of the Hip
  - Risks and Benefits of Total Hip Replacement
  - Expectations of the procedure

# My Training

- Washington and Lee University
  - BA Chemistry
- Georgetown University School of Medicine
  - Medical Degree
- NYU/Hospital for Joint Diseases
  - Orthopaedic Surgical Residency
- Steadman-Hawkins Sports Medicine, Vail, CO
  - Sports Medicine Fellowship in Knee, Shoulder and Hip
  - Mentors: Dr. Steadman and Dr. Philippon

# Hip Anatomy

- The hip is a true ball and socket joint formed by two bony structures
  - The Femoral Head (Ball)
  - The Acetabulum (Cup)
- Cartilage is the cushion between the ball and the cup
  - It allows for smooth, full motion of the joint.



# The Arthritic Hip

- The cartilage or cushion between the ball and the cup wears away
- The hip joint becomes “bone on bone” with no cushion between
- The joint becomes stiff and painful



# Common Symptoms with an Arthritic Hip

- Pain with:
  - Walking, twisting, pivoting and bending over
- Difficulty with:
  - Putting on shoes and socks, shaving legs, getting out of a low chair
- Loss of function and fun activities
- Pain worsens with time and more use

# Non-operative strategies for an arthritic hip

- NSAIDS as needed for pain
- Modification of activity to avoid pain
- Physical Therapy
- Hip injections- typically not as helpful as they are in the shoulder or the knee, so I will rarely recommend them

# When is it time to have your hip replaced?

- Your pain is experienced daily and getting worse
- You have already modified your activity and lifestyle and are not happy with the restrictions that you have
- You are getting upset because the pain and restrictions are getting to be too excessive
- This is an elective procedure – YOU decide when it is time to move forward this

# What type of hip replacement do I perform?

- Posterior approach

- There has been no clinically proven benefit to other approaches. I believe this is the best approach.
- This allows me to get your total hip in the most perfect position (this has been proven to affect the longevity and durability of your total hip replacement)
- The anterior approach can create issues with tendons and nerves and is more often associated with incomplete incorporation of your femoral component and fracture of the femur

- NO METAL ON METAL components

# Total Hip Components

- Biomet G7 OsseoTi Stem
- Smith and Nephew Synergy HA/Porous Stem or the Depuy Summit
- Oxinium or Biolox Ceramic Head
- Zimmer Vivacit-E ultra high molecular polyethylene liner



# Durability of a total hip replacement

- 80-90% should last 15-25 years if used responsibly
- Total hip replacement remains the best procedure we have in Orthopaedics
- It very reliably takes away pain and improves function

# What activity can you do after a total hip replacement?

- Walking, elliptical, hiking
- Aerobics, Yoga and Pilates
- Cycling
- Skiing
- Golf, doubles tennis
- I recommend against running

# Complications of Total Hip Replacement

- Infection
- Leg length discrepancy
- Dislocation
- Blood Clots

# Infection

- Rare, occurs in <1% of cases
- If it occurs, the total hip additional surgery is required
- Risk is reduced by:
  - Antibiotics before and for 24 hours after surgery
  - Sterile technique and clean hospital
  - Antibiotic solution during surgery
  - Risk is increased with Diabetes, Smoking and Obesity
- After surgery:
  - Take antibiotics before any medical, dental or surgical procedure to protect your hip ( I recommend this for life)
    - 2 grams of Amoxicillin 1 hour before
  - Aggressively treat any infections in your body if they occur (ie: urinary tract, skin infections, mouth infections) so that your hip does not get infected secondarily

# Leg Length Discrepancy

- An arthritic hip typically shortens that leg because of the loss of cartilage thickness and deformity to the femoral head
- A total hip will typically lengthen the hip to its original length
- I use a computer program to plan your procedure to minimize the potential of over lengthening your leg
- My goal is symmetry when this is possible

# Dislocation

- This can occur because with a total hip replacement the ball is smaller than your original ball (femoral head)
  - Occurs in 2% of total hip replacements
- The following positions are avoided for 6-8 weeks after your hip is replaced to ensure stability:
  - Hip Flexion more than 90 degrees
  - Crossing your hip across the midline
  - Internally rotating your hip
- After 6-8 weeks, 1 or 2 of these positions can be combined but all 3 at once should be avoided

# Blood Clots

- 1-2% of total hip replacements
- I use Aspirin 325 mg 2 times per day for 4 weeks and leg pumps for 4 weeks after surgery to minimize this risk
- If you have a predisposition to blood clots or have had one in the past, please let me know as I may make some changes to your postoperative medications and use more aggressive blood thinning medications.

# Hospitalization

- I perform my surgeries at Porter Adventist Hospital
- I do not like surgery centers for this operation. I do not believe total hip replacements should be sent home the same day.
- All are performed on Monday
- Patients go home or to a skilled nursing facility between Wednesday and Friday
  - This determination is made in the hospital based on how you do and what you have for your support at home. I am flexible. I want you to be safe and comfortable when you go home.

# Things to do before your total hip

- Raised toilet seat
- Shower chair or bench
- Get your body weight to an ideal position
  - 4-5 times your body weight is put through your hip with use
  - Losing weight will improve the longevity of your hip and allow you to get around better immediately after surgery
- Take care of any dental procedures before
  - If you have any loose or diseased teeth, please have these pulled or treated before your total hip – this represents a significant risk factor for infection

# What to expect

- Full weight bearing as you tolerate
- Crutches, cane or walker for 2-4 weeks as you need for balance and support
- Return to work in 3-6 weeks depending on you and your work (more manual or heavy work will take longer)
- Normal daily function by 2 months
- Full recovery by 4-6 months

# Physical Therapy

- Physical therapy after your total hip replacement is critical to get the full benefit of this procedure
- At home therapy is arranged in the hospital for 1-2 weeks until you are mobile enough for outpatient physical therapy (if you need it)
- Outpatient PT- my office can make recommendations for you if you do not already have a therapist
  - This can last for 2-6 months depending on individual needs and goals

# Post-operative Followup

- 2 weeks
- 8 weeks
- 6 months
- 1 year and then every year after to check your x-ray and prosthesis

# My Commitment

- When a patient decides to have surgery with me, I take that responsibility very seriously. I put everything I have into every surgery that I perform to ensure that my patients have the best possible outcome.

# Thank you

- I hope this has allowed you to better understand your diagnosis and what total hip replacement could do for you.
- Total hip replacement remains the best and most predictable surgery we have in Orthopaedics
- Please feel free to call us if you have any further questions. 303-321-1333

