

Hip & Knee Arthritis

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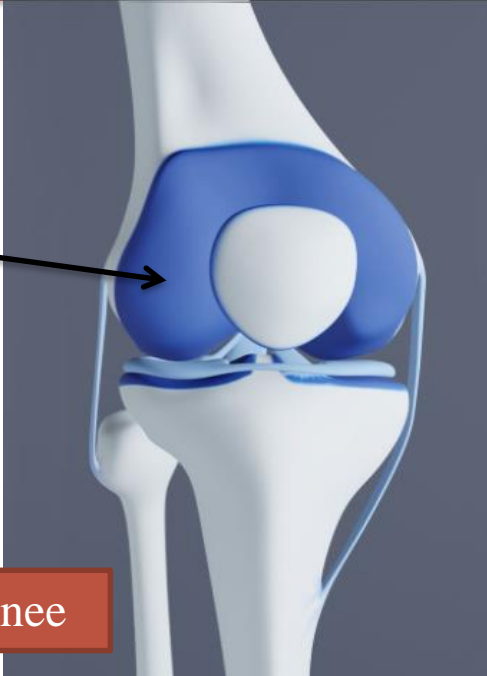
The Christ Hospital, Cincinnati (OH)

Asso Prof at University of Cincinnati

Nothing

What is Arthritis?

Cartilage



Normal Knee

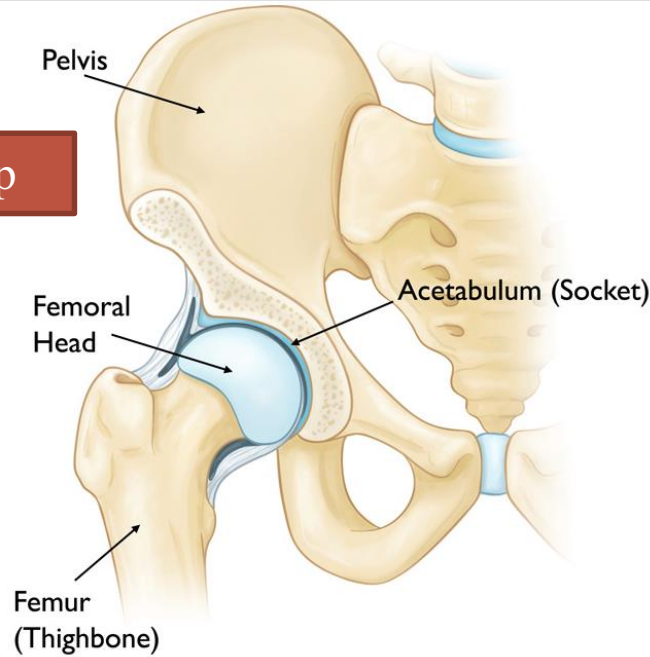


Arthritic Knee

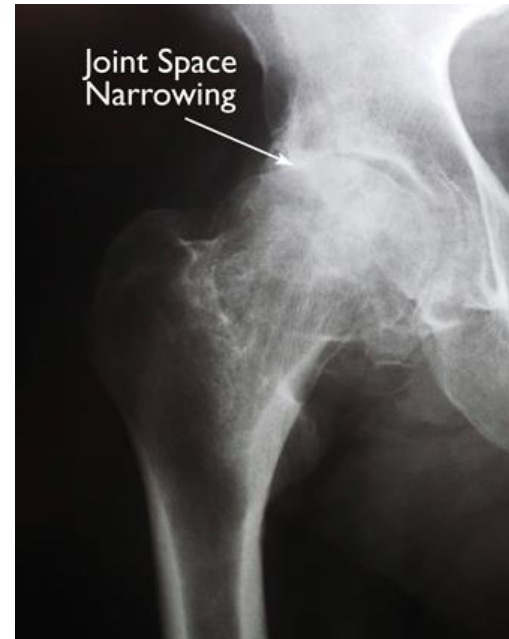
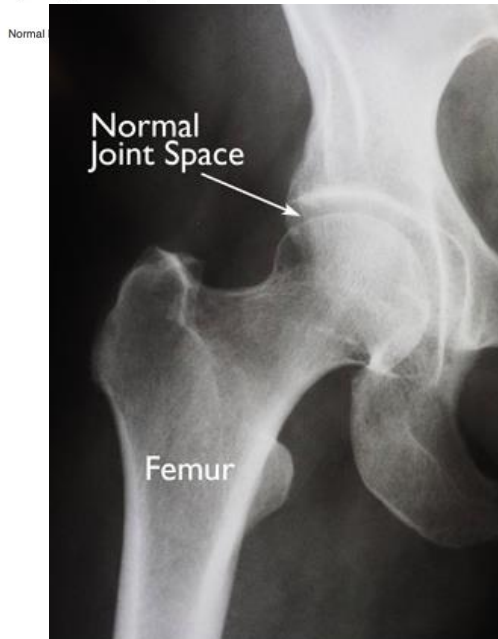
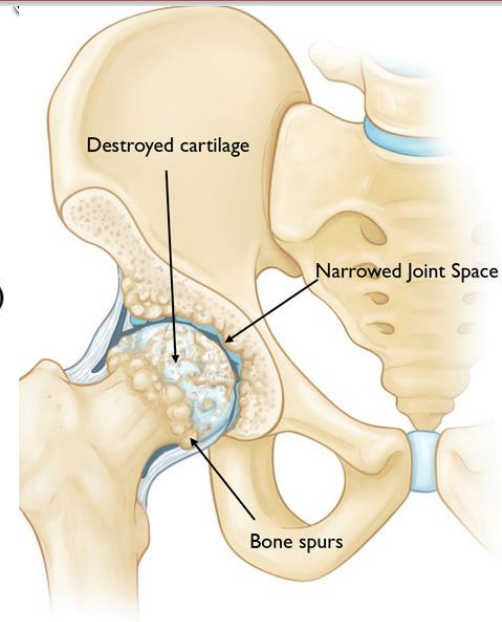


What is Arthritis?

Normal Hip



Arthritic Hip



What is Arthritis?

- Wear & Tear of the joint
- Non- reversible disease
- Progressive disease
- Presents with
 - Pain
 - Deformity
 - Functional Disability

Treatment for Arthritis

- Physical Therapy
- Anti-inflammatory medications
- Braces
- Injections

Temporary
or
Short acting

• Surgery

Relatively
Long Lasting
Pain relief

Types of Surgeries

- Arthroscopy
- Cartilage grafting
- Synovectomy
- Osteotomy

Very Limited Indications

- Total Joint Replacement

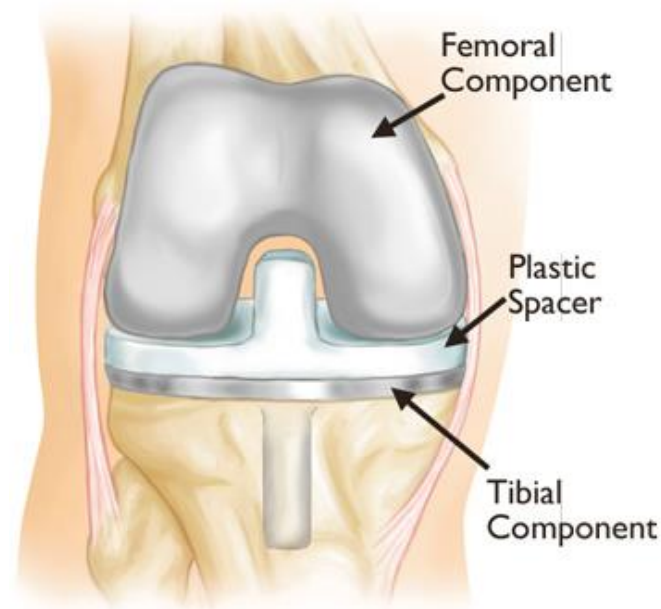
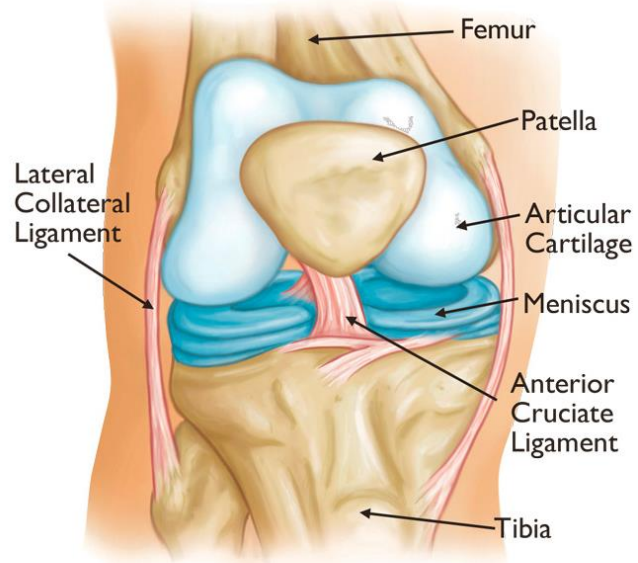
More Reliable &
Long Lasting Outcomes

Surgery

- When and Why to do the surgery?
- Is it safe?
- What are the risks?
- What is the recovery time?
- How long do I need to stay in the hospital?
- What I can & cannot do after the surgery?

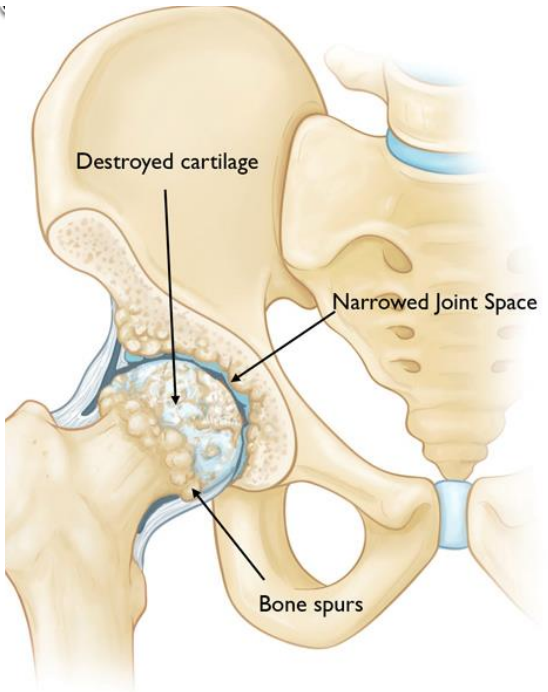
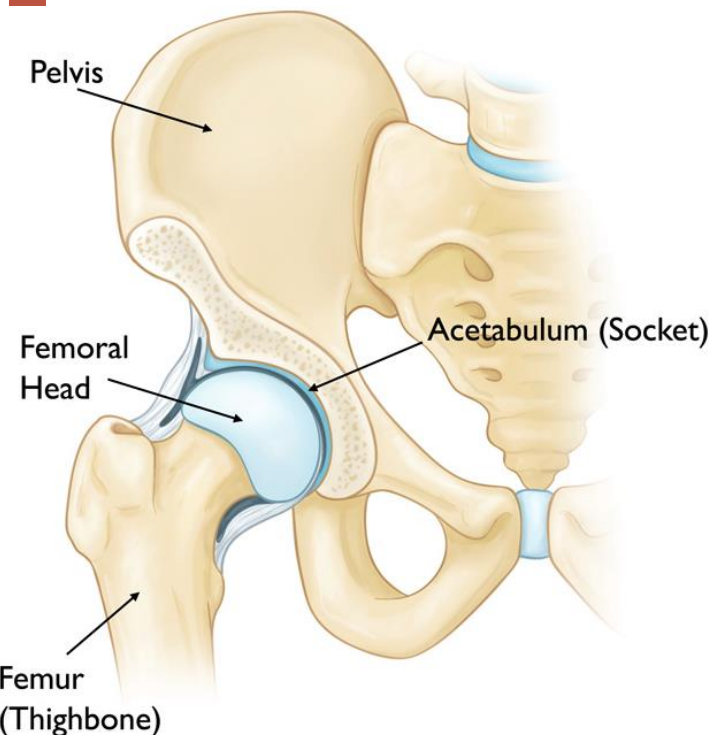
If he / she is your father / mother would you recommend the surgery?

What is
Total Joint Replacement
or
Total Joint Arthroplasty?

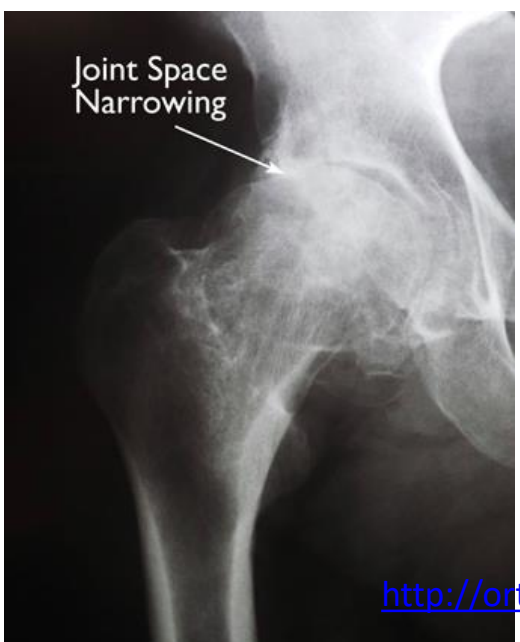
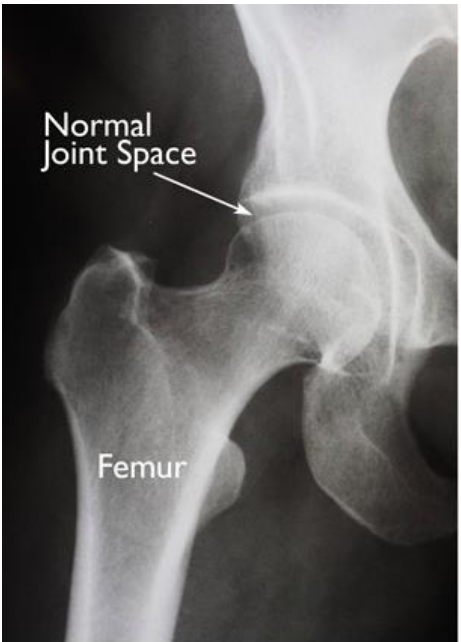


Normal knee anatomy.





Normal hip anatomy.



Material



- **Metal alloy** – Cobalt, Chromium, Nickel, Titanium, Stainless steel
- **Plastic** – Highly cross-linked polyethylene
- **Ceramic**
- **Cement** – PMMA (Polymethylmethacrylate)

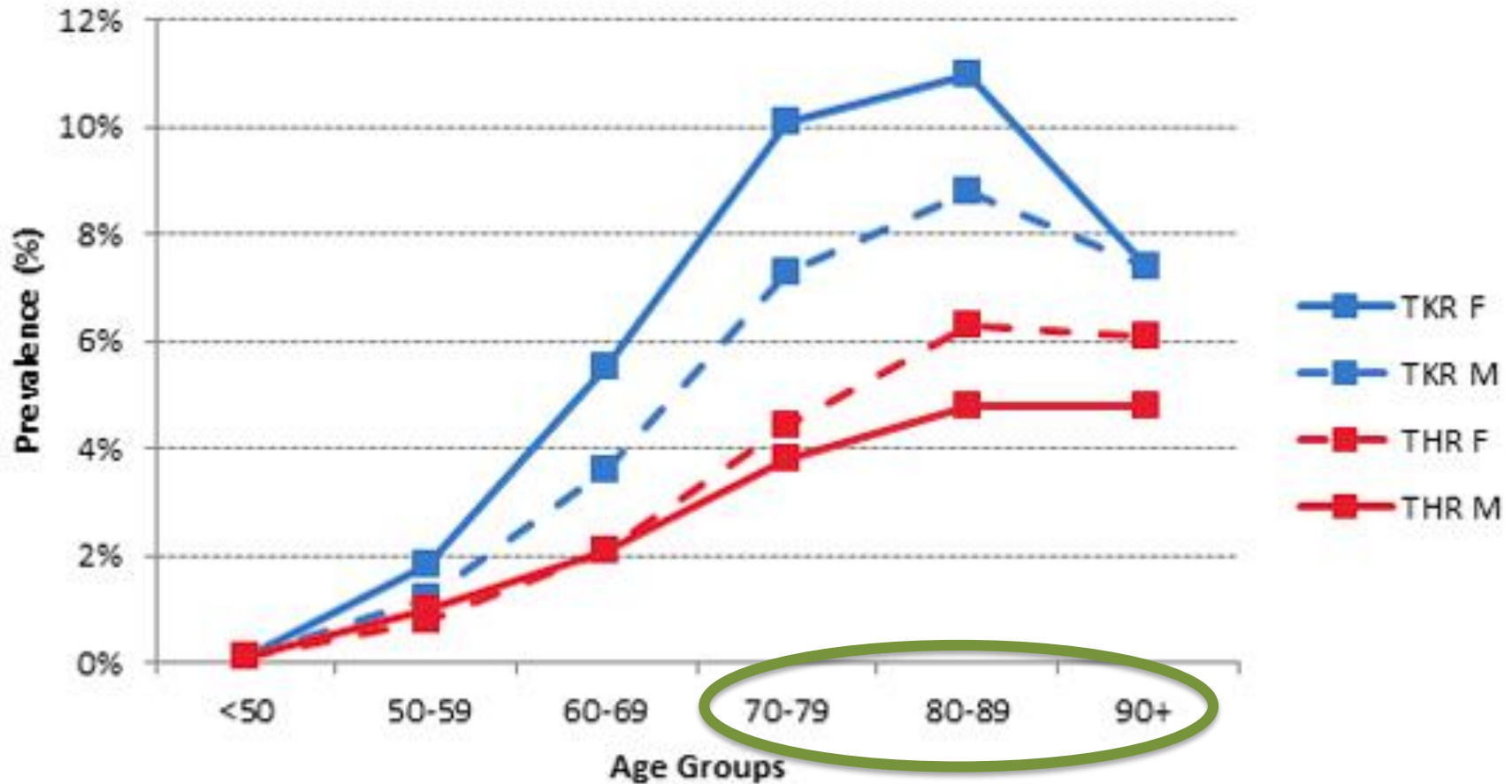
Not necessary to have all these in each joint

Surgery – When & Why?

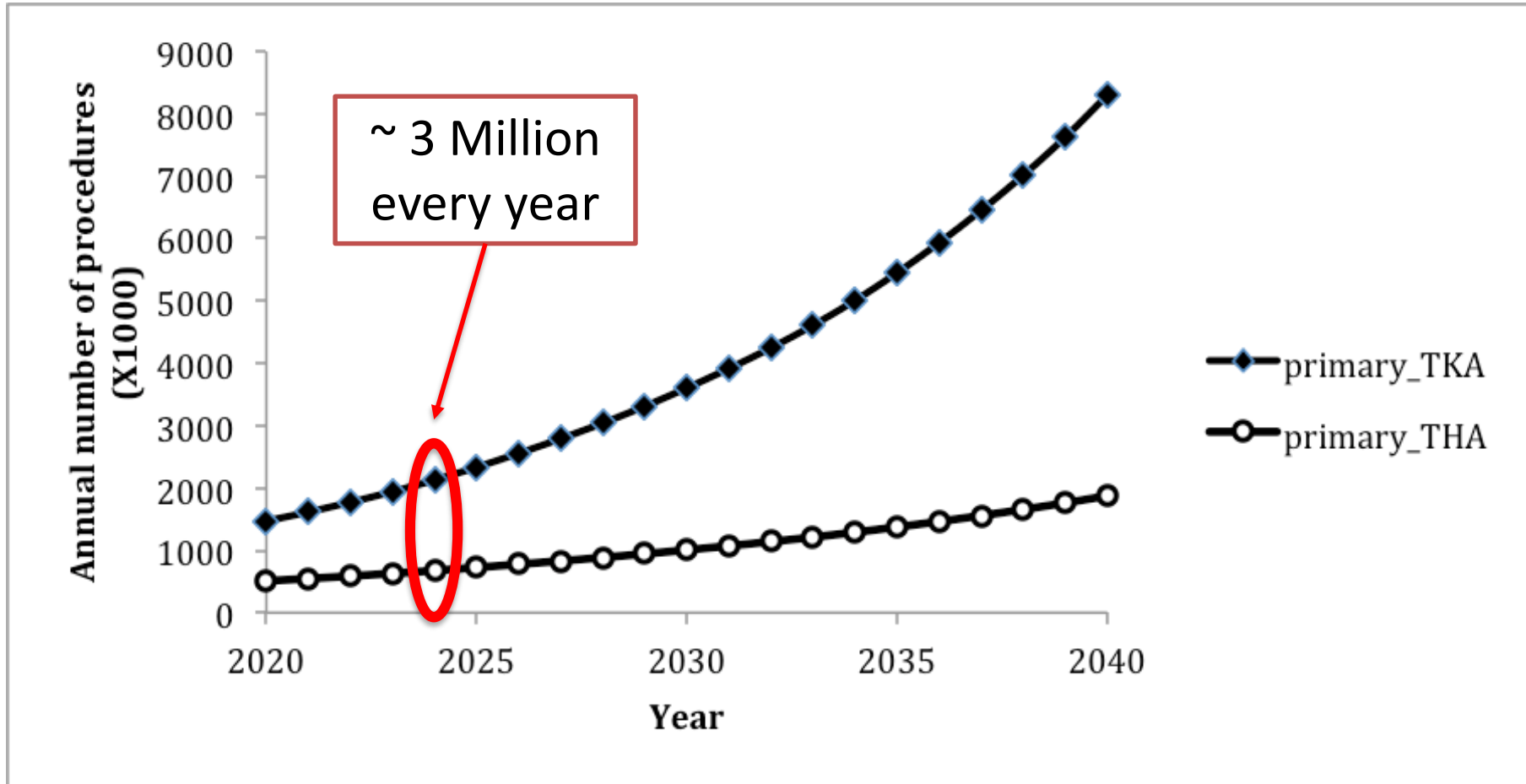
- Decision depends on:
 - Pain interfering in activities of daily living
(standing, walking, climbing stairs, interferes in sleep)
 - Functional limitations
 - When everything else failed to control the pain
 - Not on x-rays
 - Not on age
- Risk from not having surgery?
 - Nothing other than interference in the quality of life

Total Joint Replacement

Surgery – When & Why?



Total Joint Replacement



Total Joint Replacement

Surgical Outcomes



– High success rate

THE LANCET

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The operation of the century: total hip replacement

Prof Ian D Learmonth, FRCS   • Claire Young, FRCS • Prof Cecil Rorabeck, FRCS

Published: March 29, 2007 • DOI: [https://doi.org/10.1016/S0140-6736\(07\)60457-7](https://doi.org/10.1016/S0140-6736(07)60457-7)

Preparation Before the surgery

- Lab and x-ray tests
- Anesthesia check
- Rule out any source of infection
 - dental, urinary tract
- Start doing exercises before the surgery
- Quit smoking
- Improve nutrition (high protein diet)
- Discuss Post-operative plans
- Organize homecoming

Expectations After the surgery

- Hospital stay
 - **Same Day**: Often discharge by late afternoon / evening
 - Or **next day morning**
- Exercises:
 - **Walking** & joint motion
- Pain after the surgery:
 - Often well under control by **oral meds** & **Ice**
- Patients go **home**
 - **No nursing home stay needed**

Risks

- Generally has high success rate
- Low rate of major complications. Possible complications are:
 - Infection
 - Dislocation
 - Loosening
 - Leg-length inequality
 - Blood clots
 - Stiffness
 - Limp
 - Fracture
 - Persistent pain
 - Neurovascular injury
- Rare complications:
 - Pneumonia, Heart-attack, Stroke, Death

Can do after joint replacement

- Can do

- Walking
- Climbing stairs
- Swimming
- Golf
- Bike riding
- Dance
- Kneeling down may be uncomfortable



- **Cannot do**
 - Running
 - Jogging
 - Any activity that gives direct impact to the joint





Technology

Multi-disciplinary:

PCP

Arthroplasty surgeon

Anesthesiologists

Hospitalist

Infectious Disease

Nurses

Therapists



Prepare our patients for



Summary

- Total Joint Replacement surgery is a
 - reasonably reliable procedure,
 - has long term good records / outcomes

- Surgery should be done:
 - only if pain is severe enough to interfere in activities of daily living
 - Only when failed all conservative (non-surgical) treatments

- Reasonable Expectations: Make sure you align and discuss your goals before the surgery with your orthopedic surgeon

Thank you

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Locations: The Christ Hospital at
Green Township, Red bank, JSC & Liberty Township