

This presentation was created in part by the OsteoArthritis Integration System of the Vancouver Coastal Health Authority and its adapted use is gratefully acknowledged by the Sault Area Hospital





Introduction

- This presentation is for hip and knee joint replacements
- This presentation will provide you with some general information that is important to review prior to your surgery
- This presentation is currently NOT being done in person due to COVID-19 restrictions



Information for hip and knee patients before surgery:



- How to prepare yourself
- What to expect in hospital
- How to prepare your home
- Everyday activities after surgery



Main Message:

Your hospital stay will only be 1-2 days...

Majority of patients are discharged post-op day 1

BE PREPARED



Many things have changed over the last few years.

Be sure to review the process, ask questions and make arrangements ahead of your surgical date.

People who are prepared for surgery have...



- Better hospital experiences
- Fewer complications
- Smoother, faster recovery

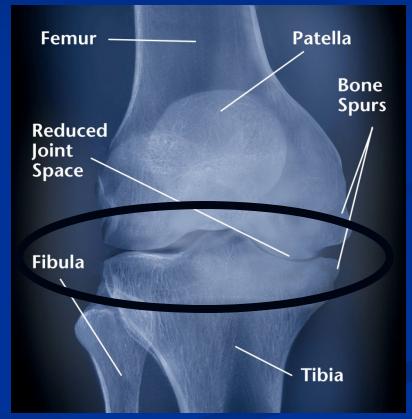


Knee X-Rays

Notice the lack of space in the 2nd picture which introduces bone to bone contact causing more pain and less mobility.



Healthy Knee Joint



Arthritic Knee Joint



Hip X-Rays

With an arthritic hip (2nd picture), again – the cartilage wears away and bones rub together causing pain and stiffness.



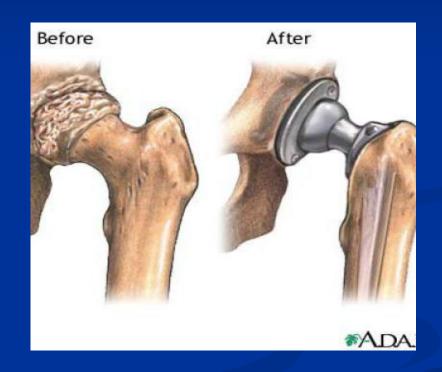


Healthy Hip Joint Arthritic Hip Joint



Total Joint Replacements





A couple examples of what your prosthetic may look like



Before Surgery...

Plan Ahead and Prepare



Know the Risks of Surgery

- Some risks include:
 - Infection (lifetime risk)
 - Blood Clot
 - Stiffness
 - Persistent pain
 - Peri-operative fracture
 - Nerve/ blood vessel/ligament injury
 - Anesthetic Risks

Your surgeon will review and discuss any additional risks and considerations individually

Reach out to your surgeon if you have specific questions/concerns

Have a Care Partner or Coach

- Choose a personal coach to be with you on your joint replacement journey.
- Someone who will support you before, during & after surgery.
- Can be a family member, friend or caregiver.
- A "guide on the side"

What does a coach do?

- Reviews this education session
- Helps to obtain and set up your equipment
- Supports you during your hospital stay (as able)
- Supports your rehabilitation once you have been discharged (ie. transportation)
- Helps you to complete daily activities at home
- Translates if English is not your first language

Pre-Admit Clinic Appointment

The hospital will call you 2-4 weeks prior to Surgery to book your appointment

What is it?

- 1) Health history and medication review with nursing staff
- 2) Anesthetic consult
- 3) Bloodwork and ECG
- 4) X-ray template
- 5) Review of rehabilitation info in the physiotherapy department
- 6) Referral to Internal Medicine consult and hematology as needed

Bring:

- 1) ALL medications & supplements in their original bottles
- 2) Completed questionnaire

PLEASE DON'T BE LATE FOR YOUR APPOINTMENT

This is where you will find out specific details of your surgery day and time

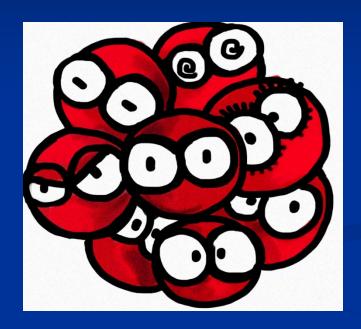


Pre-Admit Cont'd

What might be reviewed at the Pre-Admit Clinic:

- Up to date information re: Covid-19 Restrictions
- Where to go the morning of your surgery
- When to stop eating/drinking prior to surgery.
- When to stop medications as needed
- Medications that are to be taken the morning of your surgery (if any) & after surgery as well as if there are any medications that will need to be brought with you
- Pain and nausea control
- Wound care
- Preventing complications
- Any specific concerns (bring your questions!)
- Information regarding your outpatient physiotherapy follow-up

Blood Management Program



You will be directed for consultation as needed to optimize blood prior to surgery.



Smoking

- The single best thing you can do prior to surgery to improve your health & healing after surgery is STOP smoking
- There is a hospital no-smoking policy
- Strategies to help quit (speak with you doctor for further guidance):
 - Champix (prescription)
 - Acupuncture





Alcohol Use



- Tell hospital staff if you drink alcohol daily (even a small amount)
- Suddenly stopping may lead to withdrawal symptoms and it is important staff is aware
- Withdrawal will impact your recovery!!

Weight Management and Nutrition

- Excess weight adds increased stress to your joints
- Adequate protein, calories, vitamins and minerals can help with healing and recovery
- Consult Canada's Food Guide to learn more about healthy food choices
- Get advice from a Dietitian if you have a chronic illness or have any questions about weight management or nutrition

Home Set Up – <u>Before</u> Surgery

- Install stair railings or grab bars (even for one or two steps)
- Setup all needed equipment to ensure it fits properly
- Remove scatter mats, tripping hazards and clutter
- Ensure clear path to bathroom (night light may help)
- Set up on the main level if you live in a multi-storey home
- Seating surfaces should ideally be 2" above the knee (necessary for hip replacements)
 - Foam/hip cushion, furniture risers
- Rearrange shelves to minimize bend/reach
 - Move frequently used items between waist and shoulder height





- If you are having a HIP replacement, an Occupational Therapist (OT) from home care <u>NO LONGER</u> comes to your home before surgery except in exceptional circumstances
- If you are having a HIP or KNEE replacement, an OT will speak to you inhospital & provide equipment recommendations if you have any outstanding concerns
- It is expected that you be prepared with all your equipment <u>before</u> surgery



Equipment Needs

Some assistive devices are recommended depending on your home environment:

- Raised toilet seat with armrests and/or commode
- Tub transfer bench or bath seat
- Grab bars around the tub
- Non-slip mat or nonskid strips
- Handheld shower
- Long handled reacher

- Shoehorn
- Bath sponge
- Sock aid
- Crutches, cane
- Walker & basket
- Portable phone
- Elastic shoe laces
- Night lights
- 2 wheeled walker



Walking aids

Two-wheeled walker

- Mandatory for both hip AND knee patients after surgery
- This type of walker will allow for increased support and will help take pressure off your operated hip or knee
- Rollator type walkers are NOT recommended

Other recommended aids

- Cane and/or crutches may be used down the road
- They may be required initially when having to navigate stairs without railings





Tub Transfer Bench

Mandatory: Hip Patients

Highly Recommended: Knee Patients



- Can only be used with shower curtain (shower doors should be removed)
- Use non slip mat inside and outside of the tub
- Tuck in shower curtain into bench to prevent water spillage



Bath Chair

- Can be used for hip and knee patients that have a <u>walk in or</u> <u>stall shower ONLY</u>
- Installation of grab bar increases safety





Toileting Equipment

- Mandatory: Hip Patients
- Highly Recommended: Knee Patients

Pick **one** of the following toileting options below:



Commode

This option works for:

- Higher toilets
- Elongated toilet bowls
- Need for seat height adjustment



Raised Toilet Seat with Handles

This option works for :

- Round toilet bowls
- Smaller Spaces



Bariatric Equipment

If you weigh more than 250lbs you may need to consider equipment that provides additional support.



Heavy Duty Tub Transfer Bench



Heavy Duty Raised Toilet Seat with Handles or Commode



Heavy Duty 2-Wheeled Walker



Long Handled Dressing Aids

Mandatory: Hip Patients

Optional: Knee patients

Sock Aid
Used to put
on socks



Long Handled Bath Sponge used for lower body washing

Reacher used for lower body dressing





Shoe Horn used to help put on shoes

These items assist with independent dressing and bathing

– together they are called a "hip kit"

Other Beneficial Equipment

Other equipment recommended for hip and knee patients:



Professionally Installed Grab Bars



Furniture Risers



Elastic Shoelaces



Motion Activated Night Light



Handheld Shower Head



Non-Slip Mat



Non-Skid Strips



Hip Cushion (Mandatory)



Cryo/Cuff

(Knee Patients Only as directed by Surgeon)

- Provides both cold and compression to help with post-operative knee pain & swelling
- Available for rent with a pump at:
 - HealthGear Medical & Safety
 - Motion Specialties
 - *note gravity fed units not recommended
- If you have one bring into hospital
- If you choose not to rent one, you can use ice packs (provided during stay in hospital)



Where Can I Get Equipment?



- Friends or family
- Medical Supply Stores
 - Rent or purchase
 - Check for coverage through medical plan (you may require a prescription from a physician)
- Community Loan Cupboards
 - Sault Ste. Marie not available
 - Other regions encourage to look at available options

Other Daily Tasks

- Consider hiring assistance or asking family/friends for assistance with daily tasks
- Think about how you will manage activities such as:
 - Meal preparation (meal delivery services; prepare/buy frozen meals prior to surgery)
 - Yard maintenance
 - Housekeeping/Laundry
 - Pet care
 - Bathing/dressing
 - Finances
- Have an emergency contact person (and a means to contact them as needed)



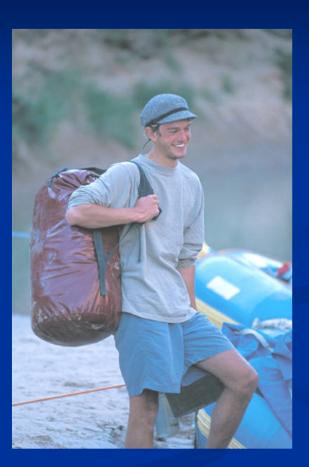
What if I can't manage?

- If you do not feel that you will be able to manage at home after surgery, you should speak with your surgeon and you may consider other options including:
 - Staying with friends or family
 - Retirement home beds in the community (Great Northern Retirement Home, Pathways or Collegiate Heights); these beds are NOT covered by OHIP
- You or your family must make these arrangements <u>BEFORE</u> surgery (so please plan ahead)
- Once you are medically able to leave the hospital, you will be discharged (often Post-Op Day 1).
- IMPORTANT: The Van Daele Convalescent Care Program is not a care option after total joint replacement surgery.

Items to Bring to Hospital

- comfortable clothes
- walking shoes/slippers
- Toiletries
- Pen/pencil and hip or knee booklet
- Ear plugs, eye mask (if needed)
- Cryo/Cuff (if you have rented one)
- No valuables please

The hospital will provide you with a walker while you are here (but good to have in the vehicle on discharge)





At the Hospital...



At the Hospital...

- Bring your belongings with you when you check in before surgery
- A designated family member can call 3A for an update or to inquire about an appointment for visitation.
- 3A unit (705)-759-3434 x 3618
- Personal cell phone is best for ongoing communication.

Please note - Visitation guidelines may change at any time due to the changing nature of the pandemic

Please label any personal belongings



Day of Surgery

- Go directly to Day Surgery (3rd Floor) and Admitting will come to you to check-in
- You will then be taken through the following during your procedure:
 - -Pre-op Room
 - -Operating room
 - -Recovery Room
 - -Surgical Unit 3A



Surgery

- Surgery takes about 1.5 to 2.5hrs for first time joint replacements
- There is often a 4-6 hrs wait for the family
- Family will be asked to provide a phone number where to be reached
- A designated family member can call (705)-759-3434 x 3618 (surgical 3A unit) for information.

Do not be alarmed if there are delays



Average Length of Stay

- 1 night only (Discharge Post-Op Day 1)
- For example...Surgery Monday =

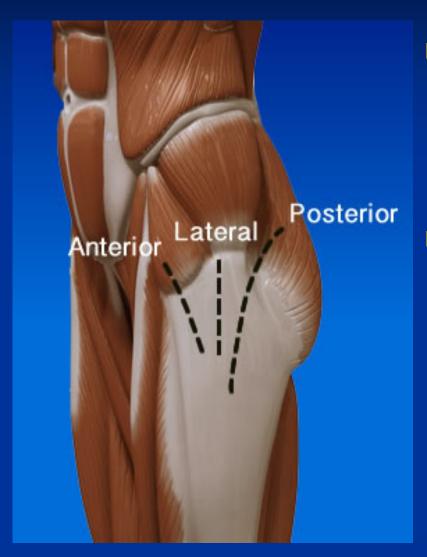
Discharge Tuesday 11am



The only reason you will stay longer is at the discretion of the surgeon based on your MEDICAL status



Hip Replacement Approaches



- Depending on your surgeon and their approach, your incision may be located in different areas on your hip.
- The surgeon must dislocate your hip to complete the surgery which is why you will have HIP PRECAUTIONS in place after surgery based on the approach that was done



After Hip Replacement Surgery

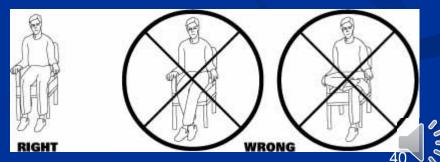
No **BENDING** Past 90 degrees (or 70° for Drs Elder, Costain)



No TWISTING



No CROSSING Mid-line



http://www.upmc.com/patients-visitors/education/rehab/Pages/basic-total-hip-replacement-precautions.aspx

Hip Precautions Video Clip:



WHY Hip Precautions?

- Reduce the risk of HIP DISLOCATION
- Allow bone growth
- Allow soft tissue healing
- Allow strengthening of muscles



Precautions After Knee Surgery

- No pillow under knee (to avoid the knee wanting to remain 'bent')
- Avoid deep squatting, kneeling or twisting
- Move joint frequently & do your home exercises!!!



Early ROM is KEY to avoid scar tissue formation and longer term mobility concerns

Weight Bearing Status

Your surgeon will determine if you are:

 Weight bear as tolerated (WBAT)

(OK to put as much weight on joint as tolerated with use of walk aids)

Partial weight bearing (PWB)

(limited weight on joint with use of increased support of walk aids)



**You must follow the surgeons instructions. This will be discussed with you before getting up.



Pain

You will be asked often to rate your pain on a scale from 0-10:



Pain control will allow you to start moving early and do your rehab

- Don't let pain get out of control
- Tell nurse if you need pain medication
- Possible side effects of pain medications: nausea, constipation (don't suffer in silence!)



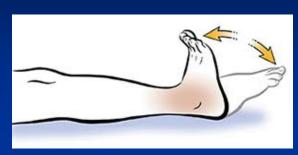
Post-Operative Day 1

You will:

- have several lines (IV, catheter, pain pump, possible nerve block) to be removed throughout the day
- have visits by PT and OT
- learn to get in and out of bed
- sit up, stand, and walk with PT
- Practice how to go up and down stairs with PT
- Exercises will be reviewed (with PT/PT Assistant) and booklet provided
- D/C home if medically stable



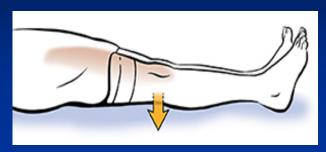
Post-Op Bed Exercises



1) Ankle Pumping

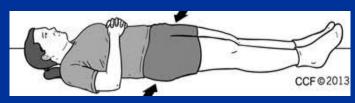
When lying down, move ankle up and down through full range of motion.

To be done 10x every hour.



2) Static Quads

Keeping leg as straight as possible, push the knee down onto the bed and hold 5-10 seconds. To be done 10x, 3-4x/day



3) Static Gluts

Keeping legs straight, squeeze bum cheeks together and hold 5-10 seconds. To be done 10x, 3-4x/day



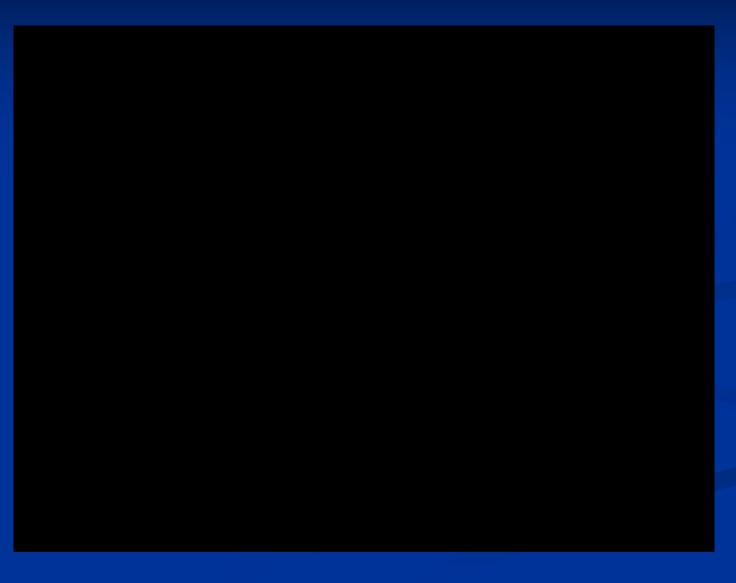
4) Knee Slides

When lying down, using strap to pull foot towards body and bend the knee as much as possible.

To be done 10x, 3-4x/day



Stair Climbing Video

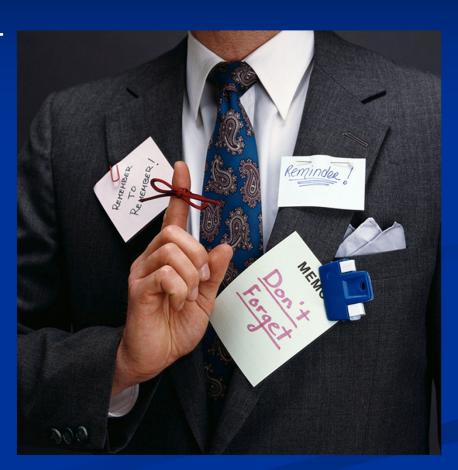


Discharge & Beyond...



Heading Home

- Arrange for a ride home you cannot drive for 6-8 weeks after your replacement
- It is strongly recommended to have someone stay with you for the first 1-2 weeks.
- Be sure home is prepared and all equipment in place in advance





Ride Home

- Minivan or mid-size vehicle recommended
- Avoid using a large truck or very low car
- If vehicle is quite low, consider having a cushion for the seat
- Equipment should be ready in the car as needed (ie. walker for transfers)
- Make sure seat is all the way back to provide you with as much leg room as possible
- Use bag on the seat to help transfer/rotate into vehicle
- You may need assist getting your legs into the vehicle



Car Transfer Video

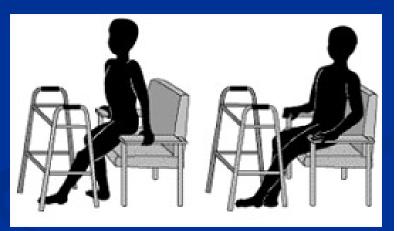


Managing Daily Activities

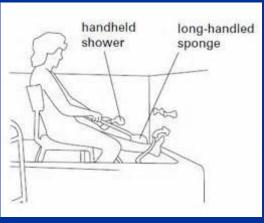
- Hip precautions will make it more difficult to complete many daily activities
- You may need to ask for help or use adaptive equipment to complete some activities

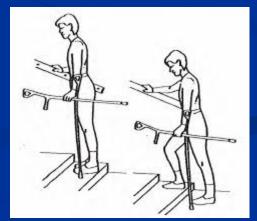








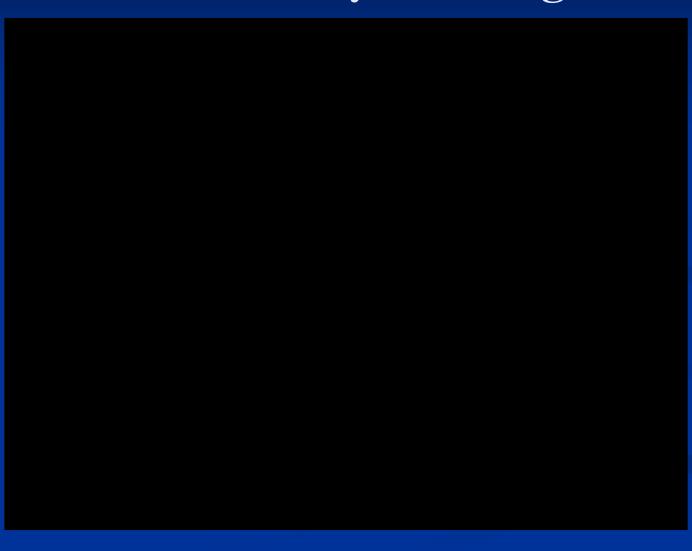






Activities of Daily Living: Lower Body Dressing

Activities of Daily Living: Lower Body Dressing



Activities of Daily Living: Toilet Transfers



Home & Community Care

- Home and Community Care are not usually involved after a joint replacement, only in extenuating circumstances.
- If required, a referral to Home and Community Care will be completed by your surgeon.
- Home Care Nursing and Personal Care Services are generally not available after an elective Total Joint Replacement.
- Home Care Physiotherapy will only be set up in exceptional circumstances

If you have concerns – please ensure you arrange for private services ahead of time



Bundled Care for Joint Replacements

- This is a model of care that was created to help improve the patient's journey through their total joint replacement by encouraging best practices and improved continuity of care between health care settings
- This means that certain clinics are partners in your journey meaning they have agreed to provide services for rehabilitation following your joint replacement



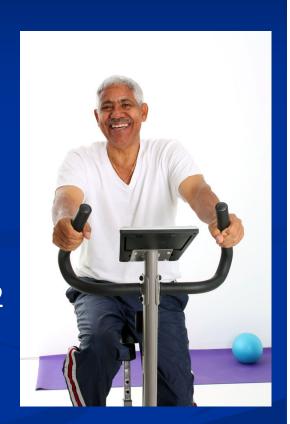
Physiotherapy Services

- Unless your surgeon decides otherwise, you will need to attend physiotherapy at an outpatient clinic in the community
- Through bundled care funding, you can go to:
 - SAH Outpatient Physiotherapy Department
 - Group Health Centre Physiotherapy
 - Algoma Physical Rehabilitation
 - Reflex Physiotherapy
 - North Shore Health Network Blind River Site
 - Maamwesying North Shore Community Health Services
- **Your outpatient physio appointment will be arranged when you attend the Pre-admit clinic prior to your surgery.
- If you decide to opt-out of bundled care funding, you may attend any other clinic and use your private insurance but you will have to arrange that yourself ahead of surgery.

Physiotherapy Services

- Total Knee Replacements:
 - It is ideal to have your first appointment within your first week post-surgery
 - Treatment is normally 1-2x/week
- Total Hip Replacements:
 - It is ideal to have an appointment approx. 2 weeks after surgery
 - Treatment is at the discretion of the therapist, approx. every 1-2 weeks

^{*}Please note that this could be a mix of virtual and in-person appointments depending on the therapist's assessment and ability of the patient to participate.





Control Swelling & Manage Pain

- Avoid sitting more than one hour at a time
- Take frequent breaks lying down with your foot elevated above the level of your heart
- Move around frequently every hour or so while awake & exercise as directed (3x/day)
- Use ice packs as needed

Do your exercises!!!

There will be pain in most cases,

use medications as prescribed



When Should I Take Medication?

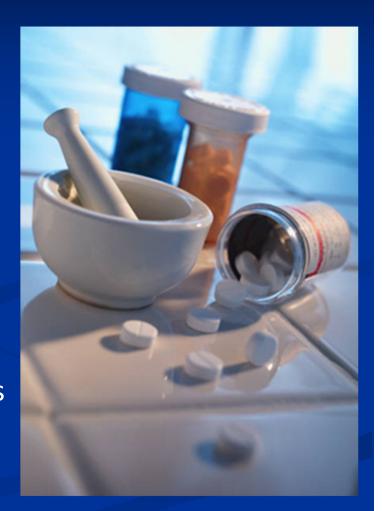
- Take regularly as prescribed
- Consider planning activity or exercise 20-30 minutes after taking your pain medication
- Review with Pharmacist,
 Surgeon or Family Doctor if
 you have any questions or
 concerns





Preventing Blood Clots?

- Once home, you will take a blood thinner in the form determined by your surgeon, usually a pill
- Fill prescription promptly
- Take the medication as prescribed!
 - Pill or injection daily for 10-35 days





Preventing Infections

- Antibiotics (IV in hospital & pill at discharge)
- No showering until surgeon advises.
- No swimming/hot tub until surgeon allows (usually at least 6 -8 weeks)
- Follow up with family doctor if you develop any other infection (dental, pneumonia)



Dental Visits After Surgery



- Tell your dentist that you have had a joint replacement
- You might need antibiotics before your appointment



Other Considerations...



When Can I Drive?

- Depends on:
 - Strength
 - Response time
 - Standard or automatic
 - Side of surgery
 - Time since surgery
 - Use of narcotic medications



Talk to your Surgeon before you start driving

Arrange transportation to/from appointments until you are given permission to drive



Driving (continued)

- Usually a minimum of 6 weeks of NO driving after surgery (regardless of which leg operated)
- Driving schools offer "refresher" courses that some orthopaedic surgeons recommend to be sure you are safe behind the wheel

It is a **common sense** and **safety decision** for you and those around you.

Air Travel



- You may set off metal detectors
- Do leg exercises every 30 min to promote blood flow
- Get up and walk hourly
- Use travel socks
- Ask for an aisle seat
- Avoid long flights for 3 months



Common Questions

- You may have questions about:
 - Return to work
 - Return to leisure activities
 - Sexual activity

Speak to your Occupational Therapist (OT)!

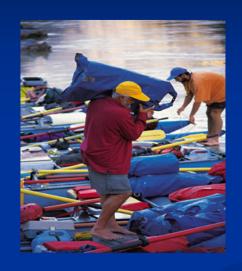




Keys to a Successful Surgery

PREPARATION

Get yourequipment andstart using itBEFORE surgery



PATIENCE

Follow physioexercise program

Support of friends and family



Remember people heal differently



Avoid Over-doing It!

"2-hour Pain Rule": Extra joint pain for more than 2 hours after the exercise - you probably did too much, too fast!

Slow down and do less next time

Apply ice to relieve symptoms



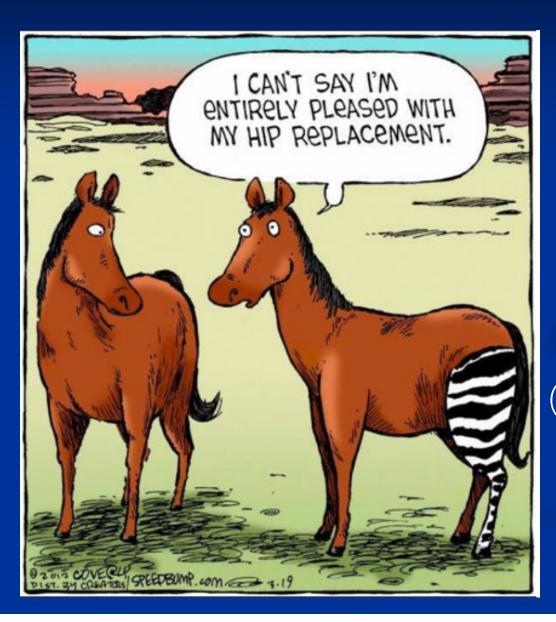
What's Next?

- Pre-Surgical Screening <u>MAY</u> need to be arranged by your Surgeon
- Pre-Admit Clinic Visit
- Start thinking about preparing your environment and gathering equipment





Thank You & Good Luck!



Questions:

Do not hesitate to contact the Bundled Care Navigator: (705) 759-3434 x 4429



Resources

- The Arthritis Society www.arthritis.ca... Arthritis Info Line: 1-800-321-1433
- The Canadian Orthopaedic Foundation patient information resources at whenithurtstomove.org
- OrthoConnect www.canorth.org
- OASIS website www.vch.ca/oasis
- myjointreplacement.ca
- Hip & Knee Replacements QBP. Ontario MOHLTC
- Google Sunnybrook Patient education video hip and knee surgery :
 - Heal Your Knees: How to Prevent Knee Surgery and What to Do If You Need It. (Klapper & Huey)
 - Heal Your Hips: How to Prevent Hip Surgery and What to Do If You Need It. (Klapper & Huey)
- Rodgers et al(2000). Reduction of Post-operative mortality & morbidity with epidural or spinal anesthesia: results from overview of randomized trails. British Journal of Medicine, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC27550/
- Total Knee Replacement & Rehabilitation: The Knee Owner's Manual Brugioni & Falkel
- Treat Your Own Knees: Simple Exercises to Build Strength, Flexibility, Responsiveness and Endurance Jim Johnson, James R. Roberson
- Obesity Xrays: http://cdn.themetapicture.com/pic/images/2014/06/19/cool-x-ray-fat-person-bones.jpg

References

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- American College of Rheumatology, Subcommittee on OA Guidelines. Recommendations for the Medical Mgmt of OA of hip & knee. 2000 update. Arthritis & Rheum (2000); 43(9); 1905-15
- Bone & Joint Canada. Hip & Knee Replacement Tool Kit. Updated 31march2011.
- S. Austin & RM Shewchuk(2013). Health Care Providers' Recommendations for Physical Activity & Adherence to Physical Activity Guidelines Among Adults with Arthritis. Prev Chronic Disease; vol10.
- OA Research Society Internat'l Guidelines 2014 Recommendations
- T.E. McAlinton et al(2014).OARIS guidelines for non-surgical mgmt of knee OA. Osteoarthritis & Carliage(2014); pp1-26
- American College of Rheumatology Subcommittee on Arthritis Guidelines (2000)
- http://www.csep.ca/CMFiles/Guidelines/CSEP-InfoSheets-older%20adults-ENG.pdf
- Weiss, E (june 2014). Knee osteoarthritis, body mass index and pain: data from the Osteoarthritis Initiative. Rheumatology(june2014)
- The Arthritis Society www.arthritis.ca
- Arthritis Info Line: 1-800-321-1433
- OrthoConnect www.canorth.org
- OASIS website www.vch.ca/oasis
- myjointreplacement.ca
- Google Sunnybrook Patient education video hip and knee surgery
- CIHI 2015 (Canadian Institute for Health Information)

Images

- Image of hip flexion precaution:
 - https://www.google.ca/search?hl=en&site=imghp&tbm=isch&source=hp&biw=1280&bih=909&q=hip+precautions&oq=hip+precautions&gs l=img.3..0l10.1832.5336.0.5682.15.8.0.7.7.0.104.582.5j2.7.0....0...1ac.1.64.img..1.14.632.wDwdb8PZPpQ#imgrc=ZZGMDFVm8tBPKM%3A
- Hip Precaution Images: http://www.upmc.com/patients-visitors/education/rehab/Pages/basic-total-hip-replacement-precautions.aspx
- Joint OA hip & Knee Xrays: Pfizer 2004 The Arthritis Society
- Lateral Incision site:
 - https://www.google.ca/search?hl=en&site=imghp&tbm=isch&source=hp&biw=1280&bih=909&q=hip+precautions&oq=hip+precautions&gs l=img.3..0l10.1832.5336.0.5682.15.8.0.7.7.0.104.582.5j2.7.0....0...1ac.1.64.img..1.14.632.wDwdb8PZPpQ#imgrc=Td8r4Y6AqwADM%3A
- Anterior & Posterior Incision Sites:
 - $\frac{\text{https://www.google.ca/search?hl=en\&site=imghp\&tbm=isch\&source=hp\&biw=1280\&bih=909\&q=hip+precautions\&oq=hip+precautions\&op$
- ADLs dressing: http://www.upmc.com/patients-visitors/education/rehab/Pages/lower-body-dressing-skirt-pants-and-underwear.aspx
- ADLs Long Handle Reacher:
 - $\frac{\text{https://www.google.ca/search?hl=en\&site=imghp\&tbm=isch\&source=hp\&biw=1280\&bih=909\&q=hip+precautions\&oq=hip+precautions\&og$
- ADLs laying in bed:
 - $https://www.google.ca/search?hl=en\&site=imghp\&tbm=isch\&source=hp\&biw=1280\&bih=909\&q=hip+precautions\&oq=hip+precautions\&gs_l=img.3..0l10.1832.5336.0.5682.15.8.0.7.7.0.104.582.5j2.7.0....0...1ac.1.64.img..1.14.632.wDwdb8PZPpQ#imgrc=QbPwQ-olT2sVvM%3A$

Images

- ADLs bathing:
- ADLs transfer to stand: http://www.suryaclinic.com/first-6-weeks-hip.html
- ADLs Stairs with cane:
 - http://www.trilliumhealthcentre.org/programs_services/neurosciences_musculoskeletal_services/mississauga/documents/Fractured_hip patient information booklet April2008FINAL.pdf
- Precautions in a grouping: