Total Hip Replacement Exercise Booklet

Restricted Weight-Bearing

Patient Name: ________________________
Surgeon: ____________________________
Date of Surgery: ____________________
Physiotherapist: ____________________

Department of Rehabilitation
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Sunnybrook
HOLLAND ORTHOPAEDIC
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Hip Precautions

The hip precautions below are to be followed at all times for the next 6-8 weeks, unless otherwise instructed by your surgeon. At your follow-up visit, you will be advised as to whether you must continue with the precautions or whether you can discontinue them.

**DO NOT BEND BEYOND 90° AT THE HIP**

**DO NOT TWIST AT THE WAIST**

**DO NOT CROSS YOUR LEGS**

**For more information on your hip precautions, please refer to your Occupational Therapy handout, “Rehabilitation After Hip Replacement Surgery”**.
Walking and Early Activity

Shortly after your surgery you will begin to walk short distances in your room and perform light activities. It is important when you begin to walk that you know your “weight bearing” status. Your physiotherapist will tell you which one to follow and the proper amount of weight permitted based on your surgeons orders.

- **Non-Weight Bearing** – Your operated leg must be OFF the floor when walking.

- **Touch Weight Bearing** – The foot of your operated leg touches the floor, but almost all your weight is taken through the arms (walker/crutches).
  
  e.g. “If you are walking on soft earth there would be no foot print on it.”

- **Partial Weight Bearing** – You are allowed up to 50% of your weight on your operated leg.

**Walking with a walker:**

Walk halfway into the walker with your *operated* leg first, followed by your *non-operated* leg. Remain standing up tall and straight. Keep your eyes up.


**Sit to Stand:**

When rising from a seated position it is helpful to *extend your operated leg* out in front of you. Put all of the weight through your arms and non-operated leg as you push up into a standing position. You must **NOT** put weight through your operated leg when rising from a chair.
Immediate Postoperative Exercises

You may begin the following exercises immediately after your surgery, as they are important for:

♦ helping to prevent complications with your breathing
♦ helping to prevent blood clots in your legs
♦ increasing your circulation

1. Deep Breathing and Coughing Exercises
   Until you are up and moving well, try to remember to take at least 10 deep breaths, followed by a cough, every hour that you are awake.

2. Ankle Pumping
   Move your feet up, down and in circles.
   Repeat 10 times every hour that you are awake.

3. Buttock Contractions
   Tighten your buttock muscles and hold for a count of 5 seconds.
   Repeat 5 to 10 times, 3 to 4 times each day.
Postoperative Exercises

These exercises begin during your hospital stay and continue on after discharge.

The following exercises will help you to restore normal hip range of motion and strength and improve your recovery.

Repeat sets of each exercise 2 to 3 times a day.

4a. Hip and Knee Bending

Lying with head of bed slightly up, wrap a towel under your \textit{operated} leg. Pull up on the towel to bring your knee towards your chest. Keep your heel on the bed.  
\textbf{Do not go beyond a 90 degree bend at your hip.}

\begin{itemize}
  \item Hold \underline{seconds}. Repeat \underline{times}.
\end{itemize}

4b. (Progression)

As you are able, progress exercise (4a) by lifting your heel off the bed.  
\textbf{Do not go beyond a 90 degree bend at your hip.}

\begin{itemize}
  \item Hold \underline{seconds}. Repeat \underline{times}.
\end{itemize}
5. Straight Leg Push Down

Press your whole operated leg into the bed. Feel the muscles in your buttock and operated leg tighten.

Hold_____seconds. Repeat_____times.

6. Quads Strengthening Over a Roll

With a towel roll under the knee of the operated leg, lift your heel off the bed. Make sure that your thigh does not come off the roll.

Hold_____seconds. Repeat_____times.

7. Hip Flexor Stretch

Keep the operated leg flat on the bed. Bend the non-operated leg toward your chest using your hands or a towel. Feel the stretch at the front of your operated hip.

Hold_____seconds. Repeat_____times.
8a. Hip Abduction

Slide the **operated** leg sideways in bed, keeping your leg pressed on bed. Keep the kneecap and toes pointing up to the ceiling. **Always keep your legs apart.**

Hold_____seconds. Repeat_____times.

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8b. (progression)

**Helpful Tip:** Place a plastic bag under your heel and/or use a bed sheet wrapped around your foot to help you move your leg initially until you are able to move it without assistance.

Lying as shown, with sheet around thighs, push **operated** leg out against the resistance of the sheet without actually moving the leg. Keep your kneecap and toes pointing up to the ceiling.

Hold_____seconds. Repeat_____times.

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9. Resisted Hip Abduction
10. Abdominal Activation

While you are lying in bed on your back, gently tighten your stomach muscles so that your belly button moves down toward your spine.

Hold______ seconds. Repeat______ times.

11. Standing Hip Bending

In standing with support for balance, bend your operated hip by bringing your knee towards your chest.

Do not go beyond a 90 degree bend.

Hold______ seconds.

Slowly lower leg down.

Repeat______ times.
12. Standing Hip Abduction

In standing with support for balance, lift operated leg out to the side while standing tall. Keep your hips level. Keep your upper body straight and toes pointing forward.

Hold_____seconds.

Slowly return leg to the starting position.

Repeat_____times.

13. Hamstring Curls

In standing with support for balance, bend the heel of the operated leg towards your buttock. Keep your thighs level with each other.

Hold_____seconds.

Slowly return leg to the starting position.

Repeat_____times.
How To Manage Stairs

While you are in hospital, your physiotherapist will teach you how to climb stairs.

**Remember** - A handrail will make things easier and safer for you. Simply place one hand on the railing, and hold both crutches on the other side of your body.

To go up the stairs:
- Keep the crutches with the operated leg.
- Start close to the bottom step, and push down through your hands.
- Step up to the first step, the non-operated leg goes up first.
- Step up to the same step with the operated leg and crutches, putting only the advised amount of weight through your operated leg. **Check your balance before you proceed to the next step.**

To go down the stairs:
- Start at the edge of the step.
- Bring the crutches and your operated leg down to the next step.
- Use upper body strength to support your weight and keep you balanced.
- Step down to the same step with the non-operated leg, putting only the advised amount of weight through your operated leg. **Check your balance before you proceed to the next step.**

If no handrail is available, use one crutch on each side of your body. Follow the same sequence as above.
After Your First Follow-up Visit

The following section of exercises are more challenging and only intended for use AFTER your first follow-up visit. This normally occurs at 6-8 weeks after your surgery.

**Note:** It is important that you check at your first follow-up visit to ensure that you are allowed to begin the following “Progression Exercises”.

♦ The following exercises and activities will help your hip muscles regain strength and endurance, and allow you to achieve a complete recovery.

♦ It is a good idea to add one new exercise at a time so you can monitor its effect on your hip.

♦ As a guide, soreness related to exercise should diminish within 2 hours of completing the exercise program. If you continue to experience exercise related soreness after more than 2 hours then you must reduce the intensity of the exercises. This can be done by reducing the number of repetitions, or by being more gentle in how you perform the exercise. In some cases you may have to stop an exercise completely.

♦ It is more important to increase the intensity (e.g. number of repetitions, or adding weight) of the exercises that strengthen your hip muscles. You do not have to increase the intensity of the exercises that stretch your muscles.

♦ If you find that an exercise is no longer challenging you might progress by:
  ⇒ Increasing the number of repetitions gradually
  ⇒ Increasing the number of sets (1 set = one group of repetitions)

**Remember:** This booklet is meant as a general guide for your exercises and other aspects of rehabilitation. If you are unsure of a particular exercise, or how to progress the intensity, it is best to clarify it with your Physiotherapist.
Guidelines for Resuming Activity

♦ **HIP PRECAUTIONS:**

Usually at your 6 to 8 week visit, you will be advised that you can stop following your hip precautions. However, there may be some exceptions and one of your healthcare team members will let you know.

Once you have permission to end your precautions, it is important to *gradually* introduce the movements that you were taught to avoid after surgery.

*For example:* You will gradually bend your hip beyond 90 degrees (right angle ‘L’) using your own muscles to perform the movement. These “new” movements should be done within your comfort zone. *Forceful, passive movements are not permitted.*

♦ **WEIGHT BEARING STATUS:**

You have not been allowed to put full weight through your operated leg during those first 6 to 8 weeks after your surgery. Once your weight bearing restriction is discontinued, you *will be allowed* to put weight on your leg.

It is important to realize that the muscles in your leg will be weaker. You will not be ready to immediately get rid of your crutches or walker, and you will therefore need to take time getting used to this change. This can take anywhere from 10 days to 1 month.
Early Progression Exercises

Only start these exercises \textit{after}:
- You have received permission.
- You have progressed to putting \textit{full weight} on your operated leg.

14. Bridging

Bend both knees up with your feet flat on the bed. Push through your feet and lift your buttocks slightly off bed. Keep your abdominal muscles tight to avoid arching your low back.

Hold \underline{_____} seconds. Repeat \underline{_____} times.
15. Sideway Stepping Exercises

In standing, practice side stepping. Take a few steps in one direction and then go back in the opposite direction, returning to your starting position.

You may use hand support as needed.

Do not bring your legs too close together or twist your trunk.

Repeat_____times.

16. Forward/Backward Stepping Exercises

Stand up tall with your weight on your operated leg. Begin by stepping forward and backward with your non-operated leg. Practice transferring your weight from one leg to the other.

When able, you can progress to taking 5 to 6 backward steps in a row. Use hand support for safety and balance.

Repeat_____times.
17. Single Leg Balance

Attempt to balance on your **operated** leg. Begin by using a support.

**Progression exercises:**
1. Increase the amount of time you are balancing while using support. (e.g. aim to balance for 20-30 seconds).
2. Carefully try to balance without the use of a support.
3. Gradually increase the amount of time on one leg while NOT using support.

18. 1/4 Wall Squat

Place your feet shoulder width apart, and at least 6 inches from the wall. Keep your toes pointing straight ahead. Keep your back and shoulders against the wall.

Slowly bend your knees ¼ of the way down. Do not allow your knees to go ahead of your toes.

You may use support as needed.

Hold_____seconds. Repeat_____times.
19. Step Exercise

Place your *operated* leg onto a _____ inch step.
Bring yourself up onto the step using the muscles in your *operated* leg. Do NOT pull yourself up.

Step down to the floor with the *non-operated* leg. Make this a slow and controlled movement.

Begin with 2 - 4 inch step. Progress to 6 inch step, and later to 8 inch step as able.

Repeat_____times.
Later Progression Exercises

You may begin these exercises after the “Early Progression Exercises” have become relatively easy and you have received permission at your first follow-up visit. You may require the help of a physiotherapist to ensure the exercises are being done correctly.

20. Hip Flexor Stretch (Progression from exercise 7)

Lying with *operated* leg hanging over the edge of bed. Bend the *non-operated* leg toward your chest using your hands or a towel. Keep your abdominal muscles tight to avoid arching in your low back.

Hold____seconds. Repeat_____times.

This exercise will help if you are still experiencing tightness at the front of your *operated* hip.

21. Bridging (Progression from exercise 14)

As able, progress your bridging by lifting your buttocks AND your *non-operated* leg straight up off the bed.

Hold_____seconds. Repeat_____times.
22a. Hip Extensor Strengthening

Lying on your stomach, bend the knee of the **operated** leg. Lift your leg off the bed slightly. Tighten your abdominal muscles to avoid arching your low back.

Hold____ seconds. Repeat____ times.

22b. (Progression)

Keeping the same position, progress by lifting the **operated** leg off the bed with the knee straight. Tighten your abdominal muscles to avoid arching your low back.

Hold____ seconds. Repeat____ times.

23. Standing Hip Extension

Standing with your hands at your side or holding something for support, lift your **operated** leg backwards, keeping your knee straight. It is important to remain standing up tall.

Hold_____ seconds.

Repeat_____ times

24. Hip Extension With Theraband

Stand with your feet slightly apart; bring your **operated** leg backward, with your knee straight, against the resistance of the band. Keep your abdominal muscles tight to avoid arching your low back. Allow the leg to return to the starting position.

Hold_____ seconds.

Repeat_____ times
25a. Hip Flexor Strengthening

In sitting, lift your operated leg up so your foot is off the floor.

Hold______seconds.

Repeat______times.

25b. (Progression)

As you are able, progress this exercise by resisting the movement with your hands.

Hold______seconds.

Repeat______times.

26. Marching in Standing

In standing, lift your hip and knee up towards your chest, alternating sides so that you are marching on the spot. Keep your back straight.

**Helpful Tip:** Perform this exercise in front of a mirror. Ensure that you are NOT rocking from side to side.

Perform for one minute.

Repeat_____times.
27a. Side-lying Hip Abduction
Lie on your non-operated side with a pillow between your knees. Bend both knees slightly. Lift the top (operated) thigh straight up as far as you comfortably can. Do NOT roll your hips forward or backward.

   Hold_____seconds. Repeat_____times.

27b. (Progression)
Maintaining the same position, straighten the knee of the top (operated) leg. Lift straight leg up to the ceiling. Do NOT roll your hips forward or backward.

   Hold_____seconds. Repeat_____times.

28. Clamshell
Lying on your non-operated side, with a pillow between your knees. Bend your hips and knees slightly. Separate your knees while keeping your feet together. Do NOT roll your hips forward or back.

   Hold_____seconds. Repeat_____times.

29. Hip Abduction with Theraband
Stand with your feet slightly apart. Bring your operated leg out against the resistance of the band. Keep your knee straight. Allow your leg to slowly return to the starting position.

   Hold_____seconds.

   Repeat_____times.
30. Hip Drop and Lift For Abductor Strengthening

Stand sideways on a step that has a railing/wall for support. Begin with your hips level. Keep the operated leg on the step, and slowly lower your non-operated leg partway down to the floor.

Keep your upper body straight.
Slowly return to the starting position.

Repeat_____times.

31. Side Stretch

Begin by standing up tall. Raise the arm of the operated side above your head. Stretch sideways away from your operated side.
In this position, take 4 deep breaths to increase the stretch.

Repeat_____times.

32. 1/4 Wall Squat With Ball (*If you have a ball)

Stand with your back and shoulders against the ball. Place your feet shoulder width apart. Slowly bend your knees 1/4 of the way down.
Do NOT allow your knees to go ahead of your toes.
Use support as needed.

Hold_____seconds.

Repeat_____times.
# Resuming an Active Lifestyle

## AT 6 WEEKS - ACTIVITIES THAT ARE ALLOWED

- **Stationary cycling:** When cycling on a stationary bike, it is necessary to keep the seat as high as possible while still being able to pedal safely.

- **Swimming:** Your incision should be completely healed before you go swimming. Be advised that the *whip kick is never recommended.*

## AT 12 WEEKS (3 MONTHS) - ACTIVITIES THAT ARE ALLOWED

- Gardening
- Bowling / curling
- Golfing
- Unrestricted sexual activity
- Outdoor cycling
- Sitting in the bathtub (*Note: Grab bars required*)

## AT 12 WEEKS (3 MONTHS) - ACTIVITIES THAT SHOULD BE DISCUSSED WITH YOUR SURGEON

- Alpine skiing
- Cross country skiing
- Tennis
- Weight lifting involving your legs
**NOTE:** It is unwise to take up new sporting activities after your hip surgery, as inexperienced people are at higher risk for injuries and accidents.

**What about my general fitness?**

You can return to the activities you used to do before your surgery within the guidelines mentioned above. If you have **not been active** before your surgery, please **consult your family physician** before starting to exercise, always keeping in mind any current hip precautions.

It is important to **start slowly**, as you will not have been as active since surgery. You can begin initially with a few minutes of activity and gradually progress (i.e. either increase the time you are performing the activity or the distance you are covering).

The intensity of your workout should allow you **to carry out a conversation or talk comfortably while exercising**.

It is best to choose low-impact activities such as swimming, cycling, power walking or Aqua-Fit. **Talk to a physiotherapist if you need more specific advice.**

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### Activities that SHOULD NEVER be undertaken

- Jogging / running
- Squash
- Raquetball

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