

# **Home exercise program: Hip exercises**

## **Pre operative**

### **1. Chest Expansion Exercises**

- Spirometry



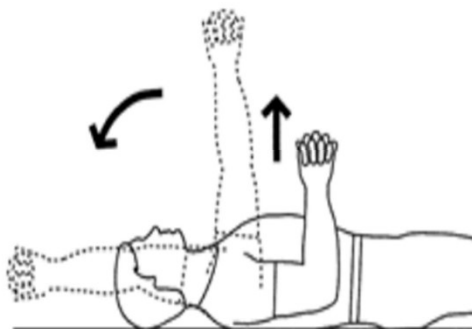
- 
- Thoracic Expansion exercises
  - Put both your hands on your chest and inhale from nose, hold for five second and exhale from mouth (Slowly and gently - 20 repetition)
  - Clasp your hand and flex your shoulder and take a deep breath in via nose then extend your shoulder while exhaling by mouth (Slowly and gently - 20 repetition)

### **2. Upper limb Exercises**

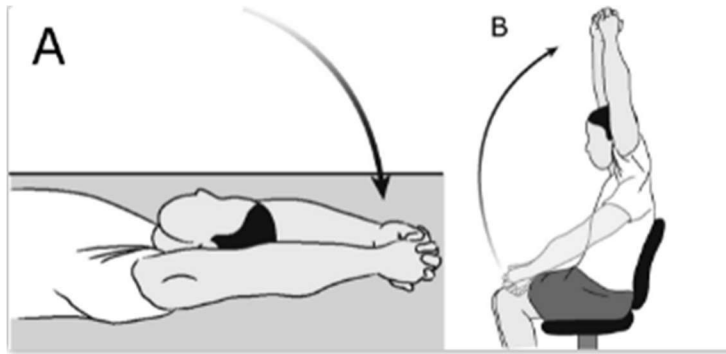
- (i) Make a fist and hold for 2 seconds (repeat it 30 times)
- (ii) Elbow flexion / Extension (30 repetition)



- (iii) Shoulder flexion / Extension (30 repetition)



(iv) Shoulder Abduction/ adduction (30 repetition)



### 3. Ankle pumps and circles (lying on back)

Bend both your ankles up, pulling your toes toward you, then bend both your ankles down, pointing your toes away from you. In addition, rotate each foot clockwise and counter clockwise, keeping your toes pointed toward the ceiling (Slowly and gently - 20 repetition)



# **Hip exercises after hip**

## **Replacement surgery**

### **Instructions:**

- Exercise programme will be easy and painless if you co-operate. This has been summarized as below:
- Patient has to arrange his walker.
- Don't Allow the patient to sleep during day time (Allow a nap not more than one hour in afternoon)
- Repeat all the exercises after one hour (10-15 Mins exercise in each hour including walking)
- Apply ice pack for 10 mins before and after exercises.

### **1. Chest Expansion Exercises**

- Spirometry



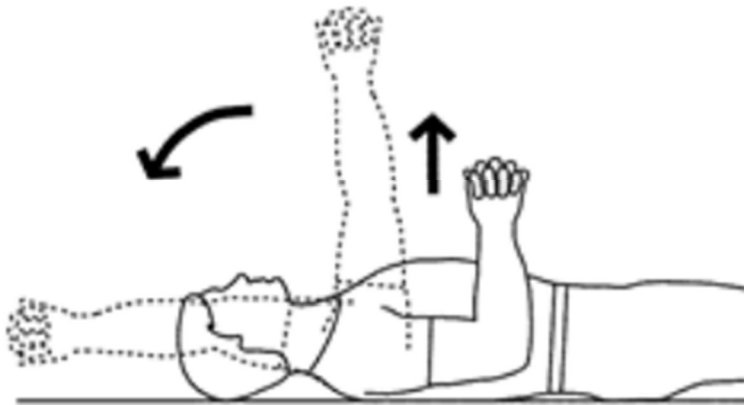
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### **2. Upper limb Exercises**

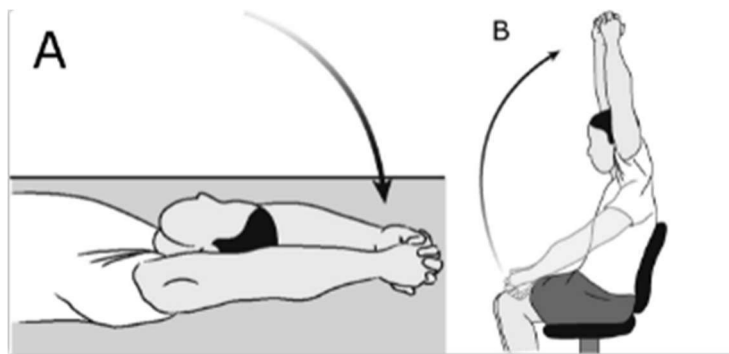
- (v) Make a fist and hold for 2 seconds (repeat it 30 times)
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Bend both your ankles up, pulling your toes toward you, then bend both your ankles down, pointing your toes away from you. In addition, rotate each foot clockwise and counter clockwise, keeping your toes pointed toward the ceiling (Slowly and gently - 20 repetition)



## EXERCISE PROGRAMME :

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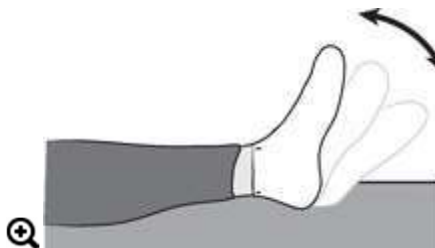
### SUPINE POSITION (lying on back)

- Support person will passively push the knee down for stretching and ask the patient to relax, holding the knee pressed till patient feels mild discomfort. Count upto 10 (5 repetitions).
- SLR Theraband assisted Straight leg raise. Keeping the knee tight and then raise the hip not too much pressure on the theraband. Count upto 10 then relax (5-10 repetitions).

### Ankle Pumps

Slowly push your foot up and down. Repeat this exercise several times, as often as every 5 or 10 minutes.

Begin this exercise immediately after surgery and continue it until you are fully recovered.

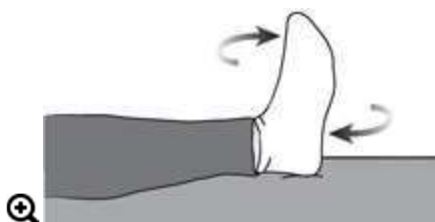


### Ankle Rotations

Move your ankle inward toward your other foot and then outward away from your other foot.

Repeat 5 times in each direction.

Do 3 or 4 sessions a day.



### **Buttock Contractions**

Tighten your buttock muscles and hold to a count of 5.

Repeat 10 times.

Do 3 or 4 sessions a day.



### **Abduction Exercise**

Slide your leg out to the side as far as you can and then back.

Repeat 10 times.

Do 3 or 4 sessions a day

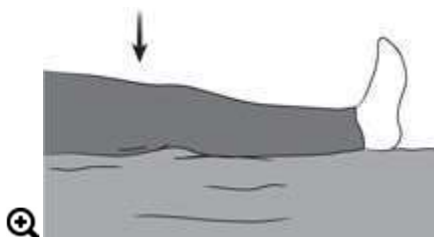


### **Quadriceps Set**

Tighten your thigh muscle. Try to straighten your knee. Hold for 5 to 10 seconds.

Repeat this exercise 10 times during a 10-minute period, rest one minute and repeat.

Continue until your thigh feels fatigued.



### **Straight Leg Raises**

Tighten your thigh muscle with your knee fully straightened on the bed. Lift your leg several inches. Hold for 5 to 10 seconds. Slowly lower.

Repeat until your thigh feels fatigued.



### **SIDE LYING POSITION –should be started only after 6 days of surgery**

- Keep Gap between both limbs like 2 pillows in between.
- quadriceps exercises contraction against resistance

### **IN STANDING/WALKING**

- Gait training (walking) with support , lifting up the knee and short focused steps .
- Small steps, bend the knees, equal weight on both feet, Heel strike, keep operated limbs abducted.
- Tip Toeing (standing on toes with minimal support ) 10 repetitions + count till 10.

### **Standing Knee Raises**

Lift your operated leg toward your chest. Do not lift your knee higher than your waist. Hold for 2 or 3 counts and put your leg down.

Repeat 10 times.

Do 3 or 4 sessions a day.



### Standing Hip Abduction

Be sure your hip, knee and foot are pointing straight forward. Keep your body straight. With your knee straight, lift your leg out to the side. Slowly lower your leg so your foot is back on the floor.

Repeat 10 times.

Do 3 or 4 sessions a day.



### Standing Hip Extensions

Lift your operated leg backward slowly. Try to keep your back straight. Hold for 2 or 3 counts. Return your foot to the floor.

Repeat 10 times.

Do 3 or 4 sessions a day.



### Early Activity

Soon after surgery, you will begin to walk short distances in your hospital room and perform light everyday activities. This early activity aids your recovery and helps your hip regain its strength and movement.

### Walking

Proper walking is the best way to help your hip recover. At first, you will walk with a walker or crutches. Your surgeon or therapist will tell you how much weight to put on your leg.







Stand comfortably and erect with your weight evenly balanced on your walker or crutches. Advance your walker or crutches a short distance; then reach forward with your operated leg with your knee straightened so the heel of your foot touches the floor first. As you move forward, your knee and ankle will bend and your entire foot will rest evenly on the floor. As you complete the step, your toe will lift off the floor and your knee and hip will bend so that you can reach forward for your next step. Remember, touch your heel first, then flatten your foot, then lift your toes off the floor.

Walk as rhythmically and smoothly as you can. Don't hurry. Adjust the length of your step and speed as necessary to walk with an even pattern. As your muscle strength and endurance improve, you may spend more time walking. You will gradually put more weight on your leg. You may use a cane in the hand opposite your surgery and, eventually, walk without an aid.

When you can walk and stand for more than 10 minutes and your leg is strong enough so that you are not carrying any weight on your walker or crutches, you can begin using a single crutch or cane. Hold the aid in the hand opposite the side of your surgery.

### **Stair Climbing and Descending**

The ability to go up and down stairs requires both strength and flexibility. At first, you will need a handrail for support and will be able to go only one step at a time. Always lead up the stairs with your good leg and down the stairs with your operated leg. Remember, "up with the good" and "down with the bad." You may want to have someone help you until you have regained most of your strength and mobility.

Stair climbing is an excellent strengthening and endurance activity. Do not try to climb steps higher than the standard height (7 inches) and always use a handrail for balance. As you become stronger and more mobile, you can begin to climb stairs foot over foot.



## **Advanced Exercises and Activities**

The pain from your hip problems before your surgery and the pain and swelling after surgery have weakened your hip muscles. A full recovery will take many months. The following exercises and activities will help your hip muscles recover fully.

These exercises should be done in 10 repetitions, 4 times a day. Place one end of the tubing around the ankle of your operated leg and attach the opposite end of the tubing to a stationary object such as a locked door or heavy furniture. Hold on to a chair or bar for balance.

### ***Elastic Tube Exercises***

#### **Resistive Hip Flexion**

Stand with your feet slightly apart. Bring your operated leg forward keeping the knee straight. Allow your leg to return to its previous position.



#### **Resistive Hip Abduction**

Stand sideways from the door to which the tubing is attached and extend your operated leg out to the side. Allow your leg to return to its previous position.



#### **Resistive Hip Extensions**

Face the door to which the tubing is attached and pull your leg straight back. Allow your leg to return to its previous position.



### **Exercycling**

Exercycling is an excellent activity to help you regain muscle strength and hip mobility.

At first, adjust the seat height so that the bottom of your foot just touches the pedal with your knee almost straight. Pedal backwards at first. Ride forward only after a comfortable cycling motion is possible backwards.

As you become stronger (at about 4 to 6 weeks) slowly increase the tension on the exercycle. Exercycle for 10 to 15 minutes twice a day, gradually building up to 20 to 30 minutes, 3 or 4 times a week.

### **Walking**

Walk with a cane until you have regained your balance skills. In the beginning, walk for 5 or 10 minutes, 3 or 4 times a day. As your strength and endurance improve, you can walk for 20 to 30 minutes, 2 or 3 times a day. Once you have fully recovered, regular walks of 20 to 30 minutes, 3 or 4 times a week, will help maintain your strength

### **SITTING POSITION (HIGH CHAIR)**

- Active (by self) straighten the knee as much as possible. Hold & count of 10 (10 repetitions).
- Patient or press by self to relax knee dangling (free swinging) 10-20 reps.
- Keep back well supported at all times. Repeat these exercise by self as many times comfortable.

### **STAND – DON'T SIT**

- Stand instead of sitting during daily activities such as, brushing your teeth, showering etc. in the first four weeks of the surgery.

### **REST-SLEEP MORE**

- You need sleep after major surgery
- Take a nap in the afternoon
- Take five-ten minute break during activities



### **REDUCE THE EFFORT REQUIRED TO DO DAILY ACTIVITIES BY :**

- Planning plan daily schedule of things to do. Set priorities, alternate heavy and light duties and allow for frequent breaks.
- Positioning – use proper working heights whenever possible. Eliminate any unnecessary bending, reaching, and stretching.
- Protection protect your joints from excessive strain.

### **ON GOING RECOVERY**

#### **DRIVING**

- You should not drive until otherwise advised. This may be 4-6 weeks after your surgery. The reason for this is that your personal safety is the main concern. You need good control and coordination of your leg to work the accelerator and brake.

### **RETURNING TO WORK**

- This may be 2-6 weeks after your surgery. It will depend on the type of work you go back to. The reason for this is that your personal safety is the main concern and Everyone recovers at different rates.

### **DIET**

- There are no restrictions to your diet (Except for diabetics) But bear in mind that you have just undergone major surgery, so make sure you eat plenty of fruits and vegetables and pulses, beans and lean meats for protein (if non vegetarian) and iron. Try and drink 6-8 glasses of water a day.

### **SPORT AND ACTIVITIES**

- Your new prosthesis is designed for activities for daily living, not high impact sports. You may involve yourself into light sports activities for sure. Walking, swimming and cycling are recommended. Aggressive sports, such as running, jumping, repeated climbing and heavy lifting may impair or compromise the function and long term success of your joint and therefore should be avoided.



Regular exercise to restore strength and mobility to your hip and a gradual return to everyday activities are important for your full recovery after hip replacement. Your orthopaedic surgeon and

physical therapist may recommend that you exercise for 20 to 30 minutes, 2 or 3 times a day during your early recovery. They may suggest some of the exercises shown below.

This guide can help you better understand your exercise and activity program, supervised by your physical therapist and orthopaedic surgeon. To ensure your safe recovery, be sure to check with your therapist or surgeon before performing any of the exercises shown.

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