

Home Exercise Programme – For Knee after Knee Replacement Surgery

EXERCISES PROGRAMME:

- Exercise programme will be easy and painless if you co-operate. This has been summarized as below:
- Arrange large size Ice Pack (3M)
- Don't Allow the patient sleep during day time (Allow a nap not more than one hour in afternoon)
- Repeat all the exercises each and after one hour (10-15 Mins exercise in each hour including walking)
- Apply ice pack for 10 mins after exercises.

SUPINE POSITION (lying on back)

- For flexion deformity, keep two cushions under the heel and press the knee down (think a water bag is placed under the knee) feel the contraction, 5 repetitions by self (active), count loud upto 10 then Relax.
- 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).
- Heel slides actively by self and active assisted, when maximum flexion is achieved, apply a little pressure to increase range towards flexion.

Chest Expansion Exercises

- Spirometry



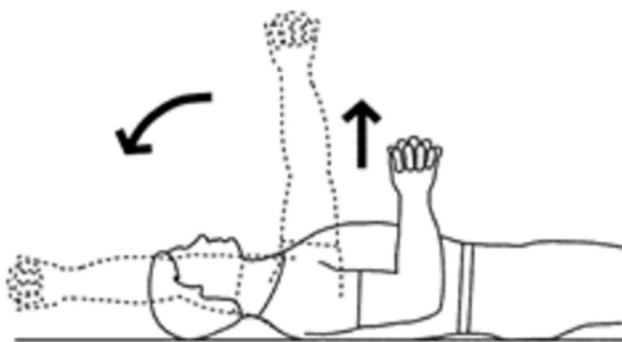
- Thoracic Expansion exercises
 - Put you both hands on your chest and inhale from nose, hold for five second and exhale from mouth (Slowly and gently - 20 repetition)
 - Clasp your hand and goes into shoulder flexion with inhale with nose and come back into extension with exhale from mouth (Slowly and gently - 20 repetition)

Upper limb Exercises

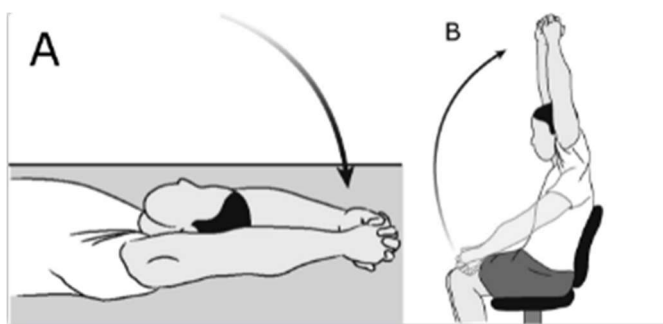
- (i) Make a fist and hold for 2 seconds (repeat it 30 times)
- (ii) Elbow flexion / Extension (30 repetition)



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



- (iv) Shoulder Abduction/ adduction (30 repetition)



Ankle pumps and circles

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 counterclockwise, keeping your toes pointed toward the ceiling.



Thigh squeezes (quadriceps sets)

Tighten the muscles on the front of your thigh by pushing the back of your knee down into the bed. Hold for 5 seconds and relax. Repeat with opposite leg.



Heel slides (hip and knee flexion)

sliding your heel up toward your buttocks while keeping your heel on the bed. Slide your heel back down to the starting position. Keep your kneecap pointed up toward the ceiling during the exercise. You may want to use a



plastic bag under your heel to help it slide easier. Repeat with opposite leg.

Leg slides (abduction/adduction)

Slide your leg out to the side, keeping your kneecap pointed up toward the ceiling. Slide your leg back to return to the starting position. You may want to use a plastic bag under your heel to help it slide easier. Repeat with opposite leg.



Straight leg raises

Bend one of your legs with your foot flat on the bed. Raise your opposite leg up (about 12 inches), keeping your knee straight. Hold briefly. Progress to holding for 5 seconds. Slowly lower your leg down and relax. Repeat with opposite leg.



SIDE LYING POSITION

- Knee bending on your own as much as possible, then count upto 10 then straighten (10 repetitions).
- At maximum flexion (bent position). Doctor will push a little further ending to level of discomfort but no pain. Hold for a count of 0-10 (10 repetitions).
- End arc quadriceps contraction against resistance Vs flexion 5:1

IN STANDING

- Gait training (walking)
- Keep the knees exposed : Small steps, bend the knees, equal weight on both feet, Heel strike
- Tip Toeing (standing on toes with minimal support) 10 repetitions + count till 10.

SITTING POSITION (HIGH CHAIR)

- Active (by self) bend the knee as much as possible. Hold & count of 10 seconds (10 repetitions).
- The support person will push into further flexion (towards bending) after maximum range is achieved at the same time ask patient to hold hands and tighten/take deep breaths.
- Keep a chair in front to support the heel and press the knee down hold an press the knee down hold for count up to 10 (10 repetitions).
- The support person will press the knee down. Patient will 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.



Knee bending (sitting knee flexion)

Sit on a chair. Bend your knee back as much as you can. Hold for _____ seconds. Return to the starting position and relax. Repeat 5 times.



Sitting kicks (long arc quads)

Sit in a sturdy chair. Lift your foot, straightening your knee as much as possible. Try to keep your knees level, as if you were holding a tray on your lap. Hold for 5 seconds. Slowly lower your leg down and relax. Return to the starting position and repeat with opposite leg.



Knee dangling/swinging

Sit on a bed so that your feet will not touch the floor. Allow your knees to bend. Swing your surgical leg back and forth so that you feel a gently rebounding sensation. Do this for 2 to 3 minutes.



SIT – DON'T STAND

- Sit instead of standing during daily activities such as, brushing your teeth, getting dressed, showering etc. in the first four weeks of the surgery.

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. Change positions frequently.

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.



Walking

Besides your exercise program, you must leave time for walking. Walking helps build your strength and endurance.

Walk around your home three to five times each day. Trips to the bathroom or kitchen are not enough. Progress to walking outside and in the community.

Important: Talk with your therapist about how far you should walk each day so you don't overdo it.

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