

Exercises for the Lower Extremity

The following exercises serve as guidelines for an exercise program, which can usually be performed by the patient without major difficulties during the decongestive, as well as during the self-management phase of the therapy. The exercise protocol may be changed to accommodate the patient's limitations. Generally, the exercise program should not be too difficult or too lengthy to perform, the movements must not cause discomfort, pain or soreness in the musculature. The affected extremity should be elevated as often as possible during the day. Patients should choose exercises they feel most comfortable with.

Ideally, the exercises are performed for 10-15 minutes following the MLD session and the patient should rest with the limb elevated for about 10-15 minutes after the exercises.

Stretching exercises (Yoga), swimming, water aerobics and walking are beneficial additions to the decongestive exercise program. Higher impact activities (e.g. step aerobics) may exacerbate lymphedema and should be avoided. A summary of high and medium risk activities for patients with lower extremity lymphedema are listed under Precautions in this Chapter.

Step-by-Step Instructions for Decongestive Exercises for the Lower Extremity

- Exercises should be performed wearing compression bandages or compression garments (except when exercises are performed in the water)
- Tight or restrictive clothing should not be worn while performing the exercises
- Exercises should be performed twice daily for about 10-15 minutes. The duration of the program should be increased slowly over a comfortable period of time
- Movements should be performed in a slow and controlled manner, and the musculature should be relaxed between each individual exercise. The relaxation phase should last at least as long as the time spent during the exercise

Exercises should be performed lying face up on the floor, preferably on a cushioned mat or other surface, that maintains some firmness. Proper breathing techniques should be used throughout the session. To avoid back strain, a small pillow may be placed under the knees

Abdominal Breathing (3 repetitions)

Place both hands on your belly

Inhale deeply through your nose into your belly (feel how you breathe against your hands)

Exhale through your mouth

Perform breathing exercises as often as possible during the day

Foot and Leg Exercises (3-5 repetitions each)

Toe Clenches (either alternating or with both feet at the same time)

Curl your toes and squeeze for about three seconds

Relax the toes for three seconds

Spread the Toes (either alternating or with both feet at the same time)

Spread the toes as far as possible and hold for about three seconds

Relax the toes for about three seconds

Ankle Curls (either alternating or with both feet at the same time)

Flex the foot as far as possible at the ankle with the toes pointing away from the body (back of the knee remains on the floor)

Hold for about three seconds

Flex the foot as far as possible at the ankle with the toes pointing to the shin

Relax for about three seconds

Ankle Rotation (either alternating or with both feet at the same time)

Rotate foot at the ankle, clockwise and counter-clockwise

Riding the Bike (for about one minute)

Lying on your back, move legs in the air as if riding a bicycle

(If you use a stationary bike, keep it on a low setting to avoid soreness or strain)

Heel Sliding

Move the heel of your foot as close as possible to your buttocks

Return to starting position and alternate the legs

Hand and Knee Touch

Lift one knee and push the palm of the opposite hand against knee. Hold for about three seconds

Relax for about three seconds and alternate sides

Butt Lift

Bend the knees and place your feet flat on the floor

Raise your buttocks off the floor and hold for about three seconds

Bring the buttocks back to the floor and relax for about three seconds

Exercises for the Lower Back (3-5 repetitions each)

Knee Hugs (keep your head on the floor)

Bend one knee and hug the knee with both arms

Bring the knee with your arms as close to the chest as possible

Hold for about three seconds

Bring the foot back to the floor

Alternate legs

Back Stretch One (keep your head and shoulders on the floor and stabilize your body with both palms pressing down on the floor)

Bend both knees and move them as close to the chest as possible

Hold for about three seconds

Bring the feet back to the floor and relax for about three seconds

Back Stretch Two (keep your head and shoulders on the floor and stabilize your body with both palms pressing down on the floor)

Bend both knees with the foot flat on the floor

Move both knees to the right side as close to the floor as possible, and hold for three seconds

Move the knees back to the middle position and relax for about three seconds

Alternate sides

Exercises with a Soft Ball (3-5 repetitions each)

Squeeze

1. Hold the ball between your knees and squeeze together for about three seconds

