

## Exercises for Upper 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 upper extremity lymphedema are listed under Precautions in this Chapter.

### Step-by-Step Instructions for Decongestive Exercises for the Upper Extremity

- Exercises should be performed wearing compression bandages or compression sleeves (except when exercises are performed in the water)
- Tight or restrictive clothing (tight underwear or bra, heavy breast prosthesis) 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 slowly increased 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 sitting on stool or a chair without leaning back. Many of the exercises however may be performed lying on the floor. Proper breathing techniques should be used throughout the session.

#### 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*

#### Neck Exercises (2-3 repetitions each)

Turn your head slowly and look to the right as far as possible; return to normal position; repeat on the left side

Bend your head to the right and try to touch the shoulder with your ear (do not shrug your shoulder). Return to the starting position and repeat for left side

#### Shoulder Exercises

*Shoulder Rolls* (3-5 repetitions each)

Rotate shoulders alternately on the right and left side.

Perform shoulder rolls using both shoulders forwards and backwards

*Shoulder Shrug* (3-5 repetitions each)

Shrug both shoulders and inhale. Exhale while the shoulders relax

#### Arm Exercises (3-5 repetitions each)

##### *Fingers*

Place palms and fingers together

Move little fingers away from each other and back together

Move ring fingers away from each other and back together

Continue with each finger

Alternate position:

Hold palms out in front of the body with the palms facing up

Move thumb and index finger together, so the finger pads touch each other, return to open hand

Move thumb and ring finger together, so the finger pads touch each other, return to open hand

Continue with each finger

##### *Hand*

*Alternate between hands, the relaxed hand rests on the leg*

Make a fist and hold for about 3 seconds

Open the fist and relax the hand for about 3 seconds

Make a fist and rotate the wrist clock wise and counter-clockwise

Make a fist and touch it to the opposite shoulder

##### *Arm and Hands*

*Picking Oranges*

Stretch out arm and lean forward

Make a fist and return hand to leg

*Climb up the Ladder*

*Alternate between arms and continue for about 30-40 seconds*

Hold arms above head

Grasp rungs of imaginary ladder and "climb" as high as possible (remain seated)

*Swimming*

Use breaststrokes as far as possible to the front, move arms to the side, then to the knees and to the front again

*Push Hand to Opposite Knee*

*Alternate between arms*

Place the palm of one hand on opposite knee and push down with hand, and upward with knee

Hold for five seconds

#### Exercises with a Broomstick (3-5 repetitions each)

*Climbing up and down the stick*

Hold the stick vertically between your knees with your hands

Take the stick at bottom with one hand and walk up and down the stick with alternating hands

##### *Weight Lifting*

Hold the stick with both hands horizontally with the palms up

Lift the stick up and towards your head and return to original position

##### *Wringing the Stick*

Hold the stick with both hands horizontally with the palms down and about one foot apart

