
SHOULDER REHABILITATION

DEPARTMENT OF OTOLARYNGOLOGY— HEAD AND NECK SURGERY

After Neck Dissection

Patients who have had a neck dissection may experience discomfort, stiffness, and decreased range of motion and strength to the affected shoulder and arm. The nerve that controls movement and sensation to the shoulder travels through the neck. This nerve may be cut or manipulated during surgery, which can cause these symptoms. Each patient will experience varying degrees of difficulty after surgery. An exercise routine can be used to try to decrease these symptoms and provide better function of the shoulder and arm.

Improving Shoulder Function

The goals of shoulder rehabilitation are to:

- Decrease pain and discomfort
- Increase range of motion
- Increase strength

You are encouraged to gradually increase your activity level at home after surgery. You should walk frequently and move your affected arm and shoulder to perform activities of daily living (eg., combing hair, dressing, bathing, eating).

It is very important to move your arm and shoulder even though it may be uncomfortable. Increased stiffness and discomfort may occur by not gradually increasing movement in your affected arm and shoulder. Good posture is also important. Keep your back and shoulders straight and tall while standing, sitting, and walking.

Doing Your Exercises

The nurses in the Otolaryngology Clinic will assess your shoulder function and level of discomfort when you return for one of your first postoperative check-ups. If your physician feels you are ready, you will be instructed on several exercises that you can easily do in your home. If it is felt that you are experiencing more discomfort than is expected, you may be referred to a physical therapist.

The exercises should be performed carefully and slowly. Avoid quick, jerky movements. Prolonged stretching is best.

Each exercise should be repeated:

- 10 times, gradually increasing to 20 repetitions
- Two to three times per day

Do not overly exert yourself, especially when first beginning your exercise program.

You may experience some discomfort after doing the exercises, but this is expected. Severe persistent pain is of concern and may indicate that you are overdoing it. If you experience this or any other problems, you may call the Otolaryngology Clinic on weekdays between 8:00 AM and 5:00 PM at 319-356-2481.

Range of Motion Exercises (Codman's Exercises):

Pendulum

Bend over placing opposite hand on the top of a table or back of a chair. Let arm move in the following directions:

- in a circle clockwise
- in a circle counterclockwise
- swinging front to back
- swinging side to side

Rock body weight in the same direction that your arm is moving

Repeat each motion 10 times, gradually increasing to 20.

Do 2 to 3 sessions per day.

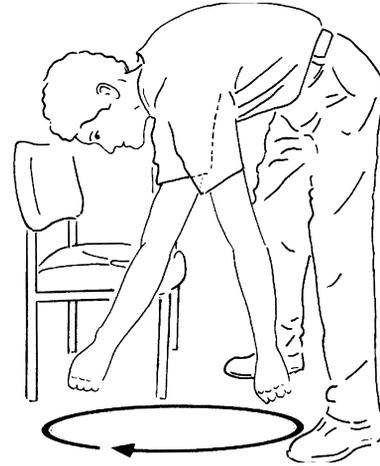


Fig. V.B.8.1

Shoulder Pulley Exercises: Repeat each exercise 10 times, gradually increasing to 20. Do 2 to 3 sessions per day.

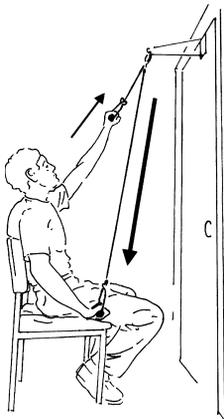


Fig. V.B.8.2

FLEXION: You may face the pulley or door or face away from it. Try to sit directly underneath the pulley as best you can. The elbow of the involved arm may be straight or bent, whichever is more comfortable for you.

Place a pulley in each hand. Gently allow the **uninvolved** arm to pull the **involved** arm up and overhead.

Watch your posture. Make sure your shoulder is moving and that you are not arching your back in order to get your arm overhead.

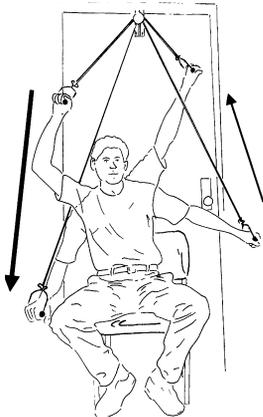


Fig. V.B.8.3

EXTENSION: You may face or face away from the door or pulley. Again try and sit as directly underneath the pulley as you can.

Place a pulley in each hand. Gently pull down with **uninvolved** arm in order to assist the **involved** arm up and out to the side. Initially, you may work in other planes of motion (ie, 30° out to the side and up, 60° out to the side and up, etc) and gradually get the shoulder straight out to the side and up.

Avoid leaning your trunk sideways in order to get your arm up. Continue to work on getting your shoulder to come straight out to the side and up. Sometimes a mirror is beneficial so you can watch your arm.

**These exercises may be done with any type of straight stick
(ie, broomstick, yardstick, cane, walking stick).**

Shoulder - 1

**Range of Motion Exercises
(Wand Activities); Flexion**

Bring wand directly overhead, leading with
uninvolved side. Reach up until you feel a stretch.

Hold _____ seconds.

Repeat 10 times, gradually increasing to 20.

Do 2 to 3 sessions per day.

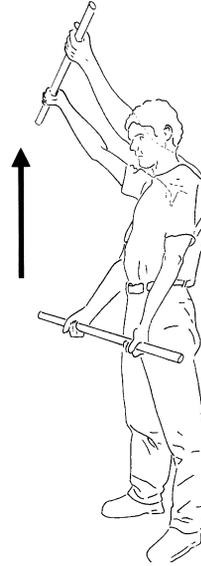


Fig. V.B.8.4

Shoulder - 2

**Range of Motion Exercises
(Wand Activities); Abduction**

Holding wand with **involved** side palm up, push
wand directly out from your side with **uninvolved**
side (palm down) until you feel a stretch.

Hold _____ seconds.

Repeat 10 times, gradually increasing to 20.

Do 2 to 3 sessions per day.

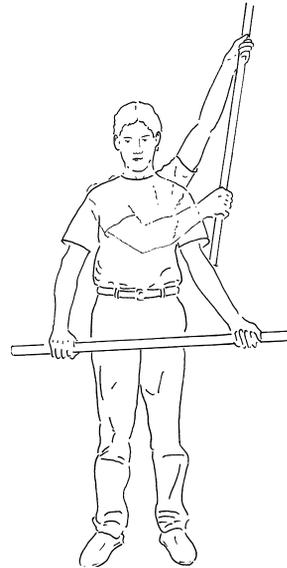


Fig. V.B.8.5

Shoulder - 7

**Range of Motion Exercises
(Self-Stretching Activities): Flexion**

Sitting upright, slide forearm forward along table as you bend from the waist until a stretch is felt.

Hold _____ seconds.

Repeat 10 times, gradually increasing to 20.

Do 2 to 3 sessions per day.

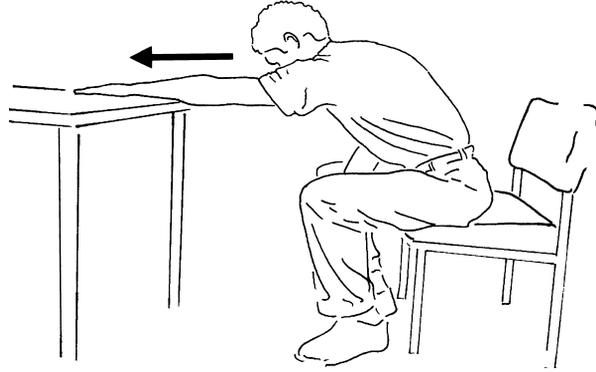


Fig. V.B.8.6

Shoulder - 8

**Range of Motion Exercises
(Self-Stretching Activities):
Flexion (Alternate)**

Slide arm up wall with palm toward you by moving closer to the wall.

Hold _____ seconds.

Repeat 10 times, gradually increasing to 20.

Do 2 to 3 sessions per day.

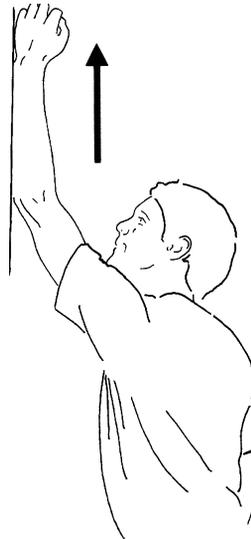


Fig. V.B.8.7