

Post Thoracotomy Rehab Protocol

Developed by Terri Brewer, MS, PT

For Dr. Neri Cohen's patients

Sunrise Health Center will provide Physical Therapy and/or Respiratory Therapy following thoracic surgery, providing individualized comprehensive personal care for these patients. The goals of this program are:

- To strengthen the shoulder girdle and prevent any negative effects of disuse, i.e. frozen shoulder.
- General reconditioning to increase endurance and overall health.
- To allow patients to come off their oxygen sooner.
- To provide education to effectively manage their condition and maximize their physical and emotional independence.
- To minimize loss of function and morbidity associated with thoracic surgery.
- To maximize pulmonary function and clearance of secretions.
- To wean patients off pain medication more rapidly as their function is restored.

This program should begin up to a month prior to surgery if feasible and will continue post-op. If it is not feasible to begin the program prior to surgery, a pre-op meeting will be scheduled with the PT to familiarize patients with the post-op program.

- I. Diaphragmatic breathing exercise - Begin and end each session with diaphragmatic breathing.
- II. Shoulder ROM exercises:
 - A. Pendulum exercises
 - B. Codman's exercises
 - C. Wand exercises in supine
 - D. Pulleys
 - E. Active exercises
- III. Shoulder strengthening exercises - Once pt is able to do 30 reps of each active exercise, 1 lb weight will be added each week if there are no adverse reactions.
 - A. Shoulder flexion
 - B. Shoulder abduction
 - C. Shoulder extension

- D. Shoulder internal rotation
- E. Shoulder External rotation
- F. Shoulder horizontal abd/adduction
- G. Shoulder shrugs
- H. Serratus anterior strengthening in supine
- IV. Pulmonary Rehab Program
 - A. Individualized progressive program consisting of various exercises, including the treadmill, rowing machine, arm ergometer, and stationary bike.
 - B. Assessment performed throughout session, including vital signs, oxygen saturation, and subjective measures using the Modified Borg Scale and the Rate of Perceived Exertion.
- V. Education- Including but not limited to the following:
 - A. Disease process and Management
 - B. Breathing Retraining
 - C. Understanding medications and how to take them properly
 - D. Nutrition
 - E. Advanced Directive
 - F. Stress management
 - G. Energy conservation
 - H. Exercise
 - I. Self assessment techniques
 - J. Bronchial hygiene
 - K. Smoking cessation