FRANKEL CARDIOVASCULAR CENTER
MICHIGAN MEDICINE

Thoracic Outlet Syndrome:
Post-Operative Guidelines for Physical Therapists Caring for TOS Patients

Please give this handout to your physical therapist. If is important that your physical therapist has experience with thoracic outlet syndrome. If you would like to discuss treatment with an experienced therapist at Michigan Medicine contact Michigan Medicine

For the therapist:

The following is intended to serve as recommendations to local Physical Therapist for treatment based upon our combined clinical experience of working with TOS patients. Due to the level of variance amongst patients with TOS, this is not a strict protocol, and is not meant to replace sound clinical judgment. The goal of this program for each client is to assess the movement and the alignment faults which may be contributing to excessive stress on the brachial plexus.

If you have limited experience with thoracic outlet syndrome and would like to discuss treatment with the PT or OT who saw the patient at Michigan Medicine, please contact us at **734-936-7070**.

Stage 1: Inpatient through Discharge (4 to 7 days)

Surgeries:

Neurogenic Vascular (venous or arteriolar)

Inpatient Physical Therapy:

- Home Program provided with cervical and shoulder ROM
- positions for sleep and sitting

- walking program

Inpatient Occupational Therapy:

- Home program provide for self-care activities
- sleeping positions
- posture
- edema management
- driving
- activities to avoid

Stage 2: PT/OT Focus for Post-Operative Weeks 3-6

Outpatient Physical Therapy Frequency:

1 time per week unless discussed with Dr. Vemuri

- Protect surgical tissues & promote healing; examples: support arm with sleep & sitting, ice, meds
- Maintain and regain cervical and gleno-humeral ROM
- Conditioning activity (walking, bicycling, elliptical etc.) Avoid vigorous swinging of involved limb
- Postures of head, shoulders and scapulae
- Scapular motion into upward rotation and elevation
- Assess for long thoracic nerve palsy
- Scar hypersensitivity or edema
- Breathing pattern (chest vs. diaphragm)
- Gentle stretching of levator, sternocleidomastoid, upper trapezii and pectorals.
- Pain management (ice or heat), monitoring post-surgical altered sensations
- ADL's, ergonomics, work situation, home and self-care activities

Precautions:

- No strengthening with weights or bands
- Manual therapies of joint or soft tissue mobilization
- Patient will have an appointment with the physician and physical therapist 3- 6 weeks after discharge

Outpatient Occupational Therapy:

Frequency: 1-2 visits

- ADLs
- Home and self-care activities
- Ergonomics for home and work
- Adaptive equipment needs after surgery
- Edema management
- Scar management

Stage 3: PT/OT Focus for Post-Operative Weeks 6-12 Therapy Nearer to Home

Frequency:

Varies from 2 times per week to 2 times per month

Strengthen:

Mid-Low trapezius, serratus anterior, rotator cuff muscles

- ROM: Maintain Normal ROM in Upper Quarter
- Movement patterns of upper quarter
- Gentle Scar Mobilization
- Progress conditioning
- Symptom management

Outpatient Occupational Therapy:

Frequency: 1-2 visits

- Incorporate adaptive techniques into ADLs
- Household / work
- Child care activities
- Recreational activities
- Ergonomics

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