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Postoperative therapy protocol

Total shoulder arthroplasty / hemiarthroplasty protocol

This protocol provides the therapists with a general guideline for patients after this type of procedure. Each patient's surgery and postoperative progress may be different, and this protocol is not intended to substitute for one's clinical decision making based on exam findings, individual progress, and/or the presence of post-operative complications. If a clinician requires assistance in the progression of a post-operative patient they should consult with the referring surgeon.

Progression to the next phase is based on Clinical Criteria and/or Time Frames as Appropriate.

Passive Range of Motion (PROM): PROM for all patients having undergone a TSA/HHR should be defined as ROM that is provided by an external source (therapist, instructed family member, or other qualified personnel) with the intent to gain ROM without placing undue stress on either soft tissue structures and/or the surgical repair. PROM is not stretching!

Weeks 1-4

- Shoulder immobilizer to be worn at all times, except therapy, showering, dressing
- While lying supine, a small pillow or towel roll should be placed behind the elbow to avoid shoulder hyperextension / anterior capsule stretch / subscapularis stretch. **(When lying supine patient should be instructed to always be able to visualize their elbow. This ensures they are not extending their shoulder past neutral.) – This should be maintained for 6-8 weeks post-surgically.**
- Active elbow/wrist/hand motion allowed immediately after surgery
- Pendulums allowed immediately after surgery and will be taught by hospital therapists.
- Starting Week 3
  - pendulums and passive range of motion allowed
  - external rotation is limited to 30 degrees in the first 4 weeks protect the subscapularis repair
- cryotherapy encouraged around the clock for first 7 days, and then wean to use several times a day.
- Avoid shoulder AROM.
- No lifting of objects
- No excessive shoulder motion behind back, especially into internal rotation (IR)
- No excessive stretching or sudden movements (particularly external rotation (ER))
- No supporting of body weight by hand on involved side

Week 5-6

- Wean sling during week 5
- Continue PROM; ER limit of 30 deg to continue for the first 6 weeks
- Begin active flexion, IR, ER, elevation in the plane of the scapula pain free ROM
  - AAROM pulleys (flexion and elevation in the plane of the scapula) – as long as greater than 90° of PROM
  - Begin shoulder sub-maximal pain-free shoulder isometrics in neutral
  - Scapular strengthening exercises as appropriate
  - Begin assisted horizontal adduction
- Progress distal extremity exercises with light resistance as appropriate
- Gentle glenohumeral and scapulothoracic joint mobilizations as indicated
- Initiate glenohumeral and scapulothoracic rhythmic stabilization
- Continue use of cryotherapy for pain and inflammation.

- While lying supine a small pillow or towel should be placed behind the elbow to avoid shoulder hyperextension / anterior capsule stretch.
- In the presence of poor shoulder mechanics avoid repetitive shoulder AROM exercises/activity against gravity in standing.
- No heavy lifting of objects (no heavier than coffee cup)
- No supporting of body weight by hand on involved side

Weeks 7-12

- Progress AROM exercise / activity as appropriate
- Advance PROM to stretching as appropriate
- Continue PROM as needed to maintain ROM
- Initiate assisted shoulder IR behind back stretch
- Resisted shoulder IR, ER in scapular plane
- Begin light functional activities
- Starting in week 9, begin progressive supine active elevation strengthening (anterior deltoid) with light weights (0.5-1.5 kg.) at variable degrees of elevation
- Resisted flexion, elevation in the plane of the scapula, extension (therabands / sport cords)
- Continue progressing IR, ER strengthening
- Progress IR stretch behind back from AAROM to AROM as ROM allows -- (Pay particular attention as to avoid stress on the anterior capsule.)

Weeks 13-16

- Typically patient is on a home exercise program by this point to be performed 3-4 times per week.
- Gradually progress strengthening program
- Gradual return to moderately challenging functional activities.
- Avoid exercise and functional activities that put stress on the anterior capsule and surrounding structures. (Example: no combined ER and abduction above 80° of abduction.)
- Ensure gradual progression of strengthening

4-6 months

- Return to recreational hobbies, gardening, sports, golf, doubles tennis