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Arthroscopic SLAP Repair Rehabilitation Protocol

DISCLAIMER: The intent of this protocol is to provide therapists with guidelines for rehabilitation of patients that have undergone surgery with Dr. Avallone. It is based on a review of the best available scientific literature and is specific to his operative technique. It is not intended to serve as a substitute for sound clinical decision making. Therapists should consult with Dr. Avallone if they require assistance in the progression of post-operative patients.

Phase I – Maximal Protection: Immediately Post-Op through Week 4

Goals

- Maintain/protect integrity of repair
- Gradually increase passive range of motion (PROM)
- Diminish pain and inflammation
- Prevent muscular inhibition
- Become independent with activities of daily living with modifications

Activities: Post-op Days 1 through 6

1. **Repair Protection**
   - Abduction brace/sling worn at all times including exercise, sleeping
2. **Modalities: cryotherapy (cold packs) for pain and inflammation**
   - Day 1-2 as much as possible (20 minutes of every hour)
   - Day 3-6 use post-activity or as needed for pain
3. **Patient Education/Precautions/Contraindications**
   - Posture, joint protection, positioning, hygiene, etc.
   - Educate on precautions
   - Maintain arm in sling/brace at all times for the first 6 days post-op
   - Keep the incisions clean and dry (no ointments)
   - No active motion of the shoulder
   - No active or passive abduction, external rotation or reaching behind the back
   - No lifting or supporting the weight of ANY object including body weight
   - No excessive stretching or sudden movements
4. **Exercises**
   - Abduction brace/sling
   - Pendulum exercises
   - Finger, wrist, and elbow AROM
   - Begin scapula musculature isometrics/sets; cervical ROM

MD VISIT SCHEDULED 2 WEEKS POST-OP: please provide a progress report including outcome measurement score and measurements of shoulder passive range of motion. If the patient is having difficulty with performing any of the above activities, with compliance, or you or the patient have any other special concerns please make note of it in your report.

Phase I Activities: Days 7 through 28

1. **Repair Protection**
   - Maintain arm in abduction brace/sling, remove only for exercise
2. **Modalities**
   - Continue cryotherapy as needed for pain control and inflammation
3. **Patient Education/Precautions**
   - Reinforce the importance of wearing brace/sling
   - Reinforce precautions on daily activities:
   - Educate on precautions/contraindications
   - Maintain arm in sling/brace, remove only for exercise

- Keep the incisions clean and dry
- No active motion of the shoulder
- No **active or passive** abduction, external rotation or reaching behind the back
- No lifting or supporting the weight of ANY object including body weight
- No excessive stretching or sudden movements

4. Exercises

- Initiate PAINFREE PASSIVE ROM to tolerance
- Flexion to 90°; progress to 125° by the end of the phase
  - Performed as table slides or supine with contralateral arm support
  - **Pulleys are NOT permissible** in this phase of the program
- External rotation (ER) to 20° with the arm at the side; progress to 75° in the scapular plane by the end of the phase
  - Performed supine with wand only
  - **NO** external rotation in abduction exercises may be performed for 6 weeks
- Internal rotation (IR) to body/chest; progress to 75° in the scapular plane by the end of the phase
  - Performed supine with wand only
- Continue elbow, wrist, and finger AROM progressing to resistive exercises as long as the shoulder muscles are not used to support the weight
- May resume general conditioning program – walking, stationary bicycle, etc.
- Aquatic therapy may begin at 3 weeks (day 21) for passive ROM only

Criteria for progression to Phase II:

- Passive forward flexion to at least 125°
- Passive ER in scapular plane to at least 75°
- Passive IR in scapular plane to at least 50°

Phase II – Protection/Active Motion Week 5 through 6

Goals

- Allow healing of soft tissue
- Do not overstress healing tissue
- Gradually restore full passive ROM (week 4-6)
- Decrease pain and inflammation

Contraindications/Patient Education

- NO upper extremity bike/ergometer/UBE use
- NO lifting
- NO supporting of body weight by hands and arms
- NO sudden jerking motions
- NO excessive movements behind the back

Activities

1. Repair Protection

- Continue use of sling/brace full time until the end of week 4
- Between weeks 4 and 6 may use sling/brace for comfort only

2. Modalities

- Continue cryotherapy at home as needed
- May use heat prior to ROM exercises
- Cryotherapy after exercises

3. Patient Education/Contraindications to activities

- NO lifting
- NO supporting of body weight by hands and arms
- NO sudden jerking motions
- NO excessive movements behind the back
- NO external rotation in abduction

4. Exercises

- **NO** UPPER BODY ERGOMETRY/CYCLING is permitted
- Progressive PROM until approximately full at Week 5-6
- Initiate active assisted ROM for flexion at the beginning of week 5 in supine and pulleys and progress to active ROM as tolerated
  - If patient demonstrates poor control/"shrug" or pain with active flexion in the upright position,

have the patient begin flexion to 90° in supine and gradually work up to the upright position
- Initiate active assisted ROM for external rotation and internal rotation in neutral and progress to active ROM as tolerated
- Initiate gentle scapular/glenohumeral joint mobilization as indicated to regain full PROM
- Initiate prone rowing to neutral arm position
- Initiate posterior capsule stretch
- Progress aquatic therapy (if attending) for light active ROM exercises

Criteria for progression to the Phase III
- Full active range of motion

MD VISIT SCHEDULED 6 WEEKS POST-OP: please provide a progress report including outcome measurement score and measurements of shoulder active and passive range of motion. If the patient is having difficulty with performing any of the above activities, with compliance, or you or the patient have any other special concerns please make note of it in your report.

Phase III: Early Strengthening Weeks 7 through 11

Goals
- Full active ROM (week 10-12)
- Maintain full passive ROM
- Dynamic shoulder stability
- Gradual restoration of shoulder strength, power, and endurance
- Optimize neuromuscular control
- Gradual return to functional activities

Contraindications to activity
- No lifting of objects greater than 5 pounds
- No sudden lifting or pushing activities
- No sudden jerking motions
- No overhead lifting
- NO EMPTY CAN ABDUCTION EXERCISES at any time
- No upper body cycling/ergometer

Activities
- Continue stretching and passive ROM (as needed)
- Introduce dynamic stabilization exercises
- Initiate strengthening program (begin with body weight and progress with free weights, elastic bands, etc.)
    - ER/IR with elastic resistance bands
    - ER in sidelying (lateral decubitus)
    - Prone rowing
    - Prone horizontal abduction
    - Horizontal adduction
    - Elbow flexion
    - Elbow flexion/extension
    - Lateral raises*
    - Full can in scapular plane*

*Patient must be able to elevate arm without shoulder or scapular hiking before initiating isotonics; if unable, continue glenohumeral joint exercises and begin flexion progression in supine.

Criteria for progression to the next phase (IV):
- Able to tolerate progression to low-level functional activities
- Demonstrates return of strength/dynamic shoulder stability
- Re-establish dynamic shoulder stability
- Demonstrates adequate strength and dynamic stability for progression to higher demanding work/sport specific activities

MD VISIT SCHEDULED 12 WEEKS POST-OP: please provide a progress report including outcome measurement score and measurements of shoulder active/passive range of motion and strength. If the patient is having

difficulty with performing any of the above activities, with compliance, or you or the patient have any other special concerns please make note of it in your report.

Phase IV – Advanced strengthening 12 weeks through 6 months

Goals
- Maintain full non-painful active ROM
- Advance conditioning exercises for enhanced functional use
- Improve muscular strength, power, and endurance
- Gradual return to full functional activities

Weeks 12 through 15
- Continue all exercises listed above
- Initiate light functional activities as Dr. Avallone permits

Weeks 16 through 19
- Continue ROM and self-capsular stretching for ROM maintenance
- Continue progression of strengthening
- Advance proprioceptive, neuromuscular activities
- If permitted by Dr. Avallone, patient may begin light sports (golf chipping/putting, tennis ground strokes)

Weeks 20 through 24
- Continue strengthening
- Continue stretching, if motion is tight
- If permitted by Dr. Avallone, therapist or trainer may initiate interval sport program (i.e. golf, doubles tennis, etc)
- With Dr. Avallone's permission, patients may begin a structured gym program using weights and machines. NO DIPS.