



ORTHOPEDICS & SPORTS MEDICINE

BAYCARE CLINIC®

Dr. Awowale

SLAP Repair, Bankart Repair, or Biceps Tenodesis

Phase 1- Maximum Protection Phase (0-6 weeks)

Goals for phase 1

- Minimize pain and inflammation
- Protect integrity of the repair
- Initiate shoulder PROM
- Prevent muscular inhibition

Precautions

- Sling x6 weeks
- NO resisted active isolated biceps activity (elbow flexion, supination) for 6 weeks; no biceps loading until week 10
- NO active external rotation, extension, or elevation

Criteria for progression to Phase 2

- Minimal pain with phase 1 exercises
- Passive flexion to $\geq 125^\circ$
- Passive abduction to 70°
- Passive ER and IR to 40° in scapular plane

Immobilization

- Immobilization in sling for 6 weeks or per physician
 - Sleep in sling for 3 weeks

PROM

- Initiate PROM in all planes of motion within limitations
 - Weeks 0-2: flexion and scaption to 90° ; IR to 45° ; ER to 30° ; Codman's
 - Weeks 3-4: advance IR to 60°
 - Weeks 5-6: flexion and scaption to 145° ; IR to 60° ; ER to 50°
- Full ROM should be achieved by 8-10 weeks

AAROM

- Gentle AAROM
 - Limit A/AAROM of shoulder to 90° during phase 1

AROM

- Weeks 0-2: Scapulothoracic AROM in all planes
- Weeks 5-6: active forearm supination (no resistance, elbow flexed)

Manual Therapy

- Initiate pain dominant glenohumeral joint mobilization (grade 1-2)
- Initiate scar mobilization, soft tissue immobilization, edema massage
- Initiate other shoulder, scapular, and cervicothoracic manual therapy techniques as needed

Strengthening

- Weeks 3-4: initiate scapulothoracic isometrics; gentle submax isometrics of shoulder musculature

Neuromuscular Control

- Weeks 3-4: initiate sub-maximal rhythmic stabilization drills

Modalities

- Cryotherapy as needed



Phase 2 – Moderate Protection Phase (Weeks 7-12)

Goals for phase 2

- Minimize pain and inflammation
- Restore full shoulder PROM
- Restore full shoulder AROM
- Initiate strengthening

Precautions

- No biceps loading until 10 weeks

Criteria for progression to Phase 3

- Minimal pain with phase 2 exercises
- Flexion to 160°
- Abduction to 150
- IR to 45° at 90° abduction; full motion in scapular plane
- ER to 45° at 90° abduction; 65° in scapular plan
- 4/5 MMT for scapular and rotator cuff muscles

Stretching

- Initiate stretching exercises if ROM not full by 10 weeks
 - Flexion and scaption to 180°
 - ER to 90° at 90° abduction
 - IR to 70° at 90° abduction

AAROM

- Continue shoulder AAROM
 - Wand, table slides, wall slides, UE Ranger, pulleys

AROM

- Continue to progress shoulder AROM in all planes
- Gradually progress from gravity reduced to full gravity positions
- Gradually progress from below shoulder to above shoulder height
- Consider single-planar and multi-planar movement patterns
- Do NOT exercise through shoulder shrug sign

Manual Therapy

- Continue pain dominant glenohumeral joint mobilization (grade 1-2) as needed
- Initiate stiffness dominant glenohumeral joint mobilization (grade 3-4) as needed
 - Utilize stiffness dominant glenohumeral joint mobilization to facilitate specific A/PROM deficits
- Continue other shoulder, scapular, cervicothoracic manual therapy techniques as needed

Strengthening

- Initiate light isotonic scapular strengthening
 - Supine press, serratus press outs, prone row, horizontal abduction, extension
- Initiate isotonic rotator cuff IR/ER strengthening with light weight resistance (bands, weights)
- Open kinetic chain to closed kinetic chain exercises
- Week 10-12:
 - Initiate submaximal isometrics and AROM for biceps
 - Progress isotonic resistive exercises
 - Begin submaximal exercises above 90° of elevation
- Do not exercise through shoulder shrug sign



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Neuromuscular Control

- Rhythmic stabilization drills
 - Gradually progress shoulder flex from 100° to 90° to 60° to 30°
 - Gradually progress shoulder IR and ER from 30° to 60° to 90° of abduction
 - Slow speeds to fast speeds
 - Eyes opened to eyes closed

Modalities

- Utilize cryotherapy, thermotherapy, and electrical modalities as needed



Phase 3- Minimum Protection Phase (Weeks 13-20)

Goals for phase 3

- Minimize pain and inflammation
- Restore full, pain-free A/PROM
- Improve shoulder, scapular, and total arm strength
- Improve neurodynamic stabilization of the shoulder
- No shoulder shrug sign with strengthening exercises

Precautions

- No throwing or overhead sports until 20 weeks

Criteria for progression to Phase 4

- AROM within 10° of contralateral upper extremity in all planes of motion
- Full, symmetrical posterior shoulder mobility
- Shoulder, scapular, and total arm strength 5/5

Stretching

- Continue stretching exercises as needed

Manual Therapy

- Continue stiffness dominant glenohumeral joint mobilization (grade 3-4) as needed
- Continue other shoulder, scapular, and cervicothoracic manual therapy techniques as needed

Strengthening

- Progress isotonic rotator cuff strengthening
 - Progress from gravity reduced to full gravity positions
 - Consider single-planar to multi-planar movement patterns
- Progress isotonic scapular strengthening exercises
 - Progress from isolated to functional movement patterns
- Progress isotonic elbow flexion and forearm supination
- Progress closed-chain strengthening exercises
 - Progress from sub-body weight to full body weight positions
 - Progress from stable to unstable surfaces
- Initiate gradual progression of sub-body weight suspension training exercises
 - TRX, GTS, etc

Neuromuscular Control

- Progress rhythmic stabilization exercises to more functional positions and dynamic movement patterns
 - Gradually progress from mid-range to end range positions
 - Gradually progress from open-chain to closed-chain positions
- Initiate gradual progression of other neuromuscular control exercises
 - Body blade, wall dribbles, ball flips, plyometrics, etc.

Core Strengthening

- Incorporate core integrated exercises with strengthening and neuromuscular control progression

Modalities

- Utilize cryotherapy, thermotherapy, and electrical modalities as needed



Phase 4 – Advanced Strengthening, Return to Function (Weeks 21-26)

Goals for phase 4

- Minimize pain and inflammation
- Maintain full shoulder A/PROM
- Restore shoulder, scapular, and total arm strength, power, and endurance
- Restore neurodynamic stabilization of the shoulder
- Safe and effective return to previous level of function for occupational, sport and desired activities

Criteria for return to work, function, sport

- Minimal pain with phase 4 exercises
- Full, pain-free shoulder A/PROM and strength
- Complete return to function testing

Stretching

- Continue stretching exercises as needed
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Manual Therapy

- Continue stiffness dominant glenohumeral joint mobilization (grade 3-4) as needed
- Continue other shoulder, scapular, and cervicothoracic manual therapy techniques as needed

Strengthening

- Continue phase 3 strengthening exercises
- Consider specific demands of occupational, sports, and desired activities

Neuromuscular Control

- Continue phase 3 neuromuscular control exercises
- Consider specific demands of occupational, sports, and desired activities

Core Strengthening

- Continue to incorporate core integrated exercises with strengthening and neuromuscular control progression

Sport-Specific Training Program

- Progress interval sport programs
 - Weeks 24-28, begin throwing from mound

Work Specialty Rehabilitation Program

- Transition to work conditioning if physical laborer
- Transition to work re-conditioning of specific occupational demands
 - Lifting requirements, overhead tasks, repetitive tasks, tool or machine work, etc.

Modalities

- Utilize cryotherapy, thermotherapy, and electrical modalities as needed

Return to Function Testing: Aurora BayCare return to function for the upper extremity protocol to be used

- **Week 24: Return to function testing** per MD approval (appt must be scheduled with Aurora BayCare Sports Medicine department – East Side location to complete testing)
- **Criteria:** pain-free, 90% total arc of motion of contralateral arm, DASH \leq 10% disability, isokinetic strength and functional testing at 90% compared to uninvolved, adequate scapular control with sport specific tasks