

# REHABILITATION PROTOCOL: SLAP REPAIR

## DR. KEVIN SHEPET

## PHASE I - IMMEDIATE POSTOPERATIVE PHASE (Postoperative Day 1 to Week 6)

#### **Goals:**

- Protection of anatomic SLAP repair
- Control postoperative pain / inflammation
- Promotion of shoulder musculature contraction
- Retard muscular atrophy
- Early controlled motion glenohumeral / scapulothoracic joints

#### **WEEK 0-3**

- Sling 4 weeks or per MD recommendation
- Sleep in shoulder sling / brace for 4 weeks
- Elbow, wrist, hand ROM, gripping exercise
- PROM / light AAROM glenohumeral joint
  - o Flexion to 60° (week1)
  - $\circ$  Flexion to  $70^{\circ}$ - $75^{\circ}$  (week2)
  - o ER to 10°
  - $\circ$  IR to  $30^{\circ}$
- Submaximal isometrics for shoulder musculature (no biceps)
- No active shoulder ER / Extension / Abduction
- Initiate proprioceptive training end of week 1

#### **WEEK 3-4**

- Discontinue sling / immobilizer at 3-4 weeks or per MD recommendation
- Continue PROM / AAROM (progression based on evaluation of patient and subjective report)
  - Flexion to 90°
  - Abduction to 80°
  - o ER to 30°
  - $\circ$  IR to  $40^{\circ}$
- AAROM: scapular plane elevation and ER to above limits
- Scaption isometrics @ 30 degrees (against gravity)
- Initiate scapular neuromusculature reeducation (rhythmic stabilization)
- Continue shoulder isometrics (no bicep contractions)
- Initiate shoulder isotonic program at  $0^{\circ}$  of shoulder abduction ER / IR
- Cryotherapy with progression to thermal (heat) at week 3

## **WEEK 4-6**

- Gradually improve ROM of shoulder
  - Flexion to 145°
  - o ER at 45° abduction: 45°-50°
  - o ER at 45° abduction: 55°-60°
  - At 6 weeks begin slow progression toward ER at 90° abduction progress to 30°-40° ER
- May initiate stretching exercises
- Continue isotonic tubing ER/IR (arm at side)
- Initiate Active Shoulder Abduction (without resistance)
- Initiate "Full Can" Exercise (Weight of Arm)
- Initiate Prone Rowing, Prone Horizontal Abduction
- NO Biceps Strengthening
- Bodyblade: scaption @ 0°, ER/IR \* not aggressive\*
- Dynamic weightbearing on ball (bilateral)

## Phase II – Intermediate Phase: Moderate Protection Phase (Week 6-14)

#### **Goals:**

- Gradually restore full ROM (week 10-12)
- Protect the integrity of the surgical repair
- Restore muscular strength and balance

#### **WEEK 6-8**

- Gradually progress to full ROM:
  - Flexion to 180°
  - o ER at 90° abduction: 90°-95°
  - o IR at 90° abduction: 70°-75°
- Continue to progress isotonic strengthening program
- Continue PNF strengthening
- Initiate Throwers Ten Program
- ER/IR with resistive tubing
- ER/IR standing with weight
- Resisted scaption

## **WEEK 8-10**

- PROM: to tolerance including cocking (ER @ 90° ABD)
- Bodyblade horizontal abd/add
- Supine cocking with weight (eccentric emphasis)
- Supine PNF D2 diagonal with weight (eccentric emphasis)
- Dynamic weightbearing on ball (unilateral)

#### **WEEK 10+**

- May initiate slightly more aggressive strengthening
- Progress ER to Throwers Motion
  - o ER at 90° abduction: 110°-115° in throwers (Week 10-12)
- Progress isotonic strengthening exercises to include manual resistance
- Continue all stretching exercises \*\*Progress ROM to functional demands (i.e. overhead athlete)
- Continue all strengthening exercises
- Rebounder cocking and backhand toss
- Push ups
- Increase speed of training
- Increase emphasis on eccentric control of cocking

## Phase III – Minimal Protection Phase (Week 14 - 20)

#### Goals:

- Establish and maintain full ROM (throwers motion)
- IMPROVE muscular strength
- INITIATE power and endurance. Gradually initiate functional activities

#### Criteria to enter Phase III:

- Full non-painful ROM
- Satisfactory stability
- Muscular strength (good grade or better)
- No pain or tenderness

#### Week 14 - 16

- Continue all stretching exercises (capsular stretches)
- Maintain Throwers Motion (emphasis on shoulder ER)
- Continue strengthening exercises:
  - o Throwers Ten Program with progression to Advanced Throwers Program
  - PNF Manual Resistance
  - o Endurance training (stabilization/perturbation at end range 90/90 position)
  - o Initiate light plyometric program
  - o Restricted sport activities (light swimming, half golf swings)

#### Week 16 - 20

- Continue all exercise listed above
- Continue all stretching
- Continue Throwers Ten Program / Advanced Throwers 10 program
- Continue Plyometric Program (90/90 positioning plyos)
- Initiate interval sport program (throwing)
- \*\*See interval Throwing Program

## Phase IV – Advanced Strengthening Phase (Week 20 – 26)

#### Goals:

- Enhanced muscular strength, power and endurance
- Progress functional activities
- Maintain shoulder mobility

#### Criteria to enter Phase IV:

- Full non-painful ROM
- Satisfactory static stability
- Muscular strength 75-80% of contralateral side
- No pain or tenderness

#### Week 20 - 26

- Continue flexibility exercises
- Continue isotonic strengthening program
- PNF manual resistance patterns
- Plyometric strengthening
- Progress interval sport programs

## Phase V – Return to Activity Phase (Month 6 to 9)

#### Goals:

- Gradual return to sport activities
- Maintain strength, mobility and stability

#### Criteria to enter Phase V:

- Full functional ROM
- Muscular performance isokinetic (fulfills criteria)
- Satisfactory shoulder stability upon examination
- No pain or tenderness

## **Exercises:**

- Gradually progress sport activities to unrestrictive participation
- Continue stretching and strengthening program