Southern California Orthopedic Institute

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Anterior Stabilization Protocol

This rehabilitation protocol has been developed for the patient following anterior shoulder stabilization surgical procedure. This protocol is for mechanically robust repairs in people without risk factors for impaired healing. The protocol will vary in length and aggressiveness depending on factors such as:

Size and location of tear

Quality of the repaired capsulolabral tissue

Additional surgical procedures

Degree of shoulder instability/laxity prior to surgery

Acute versus chronic condition

Length of time immobilized

Strength/pain/swelling/range of motion status

Rehabilitation goals and expectations

Early short are passive range of motion is highly beneficial to enhance circulation within the joint to promote healing. The protocol is divided into phases. Each phase is adaptable based on the individual and special circumstances. The **overall goals** of the surgical procedure and rehabilitation are to:

Control pain, inflammation, and effusion
Regain normal upper extremity strength and endurance
Regain normal shoulder range of motion
Achieve the level of function based on the orthopedic and patient goals

Initiation of this protocol may be delayed up to 4 weeks post-op. The supervised rehabilitation program is to be supplemented by a home fitness program where the patient performs the given exercises at home or at a gym facility. **Important post-op signs** to monitor:

Swelling of the shoulder and surrounding soft tissue Abnormal pain response, hypersensitivity, increasing night pain Severe range of motion limitations Weakness in the upper extremity musculature Improper mechanics or scapular dyskinesia Core and peri-scapular strength deficits

Return to activity requires both time and clinical evaluation. To safely and most efficiently return to normal or high level functional activity, the patient requires adequate strength, flexibility, and endurance. Functional evaluation including strength and range of motion testing is one method of evaluating a patient's readiness return to activity. Return to intense activities following shoulder stabilization requires both a strenuous strengthening and range of motion program along with a period of time to allow for tissue healing. Symptoms such as pain, swelling, or instability should be closely monitored by the patient and therapist. Specific exercises may be added, substituted, or

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modified where clinically appropriate by experienced sports/shoulder therapists or trainers who have expertise in the care of post-operative shoulder rehabilitation. While patients may be "cleared" to resume full activities at 6+ months following surgery, additional time spent in full activity or sport participation is often necessary to achieve maximal recovery. Suggestions during rehab:

- 1. The RC gets a better blood supply when the shoulder is slightly away from the body; in addition, higher EMG activity is elicited at the posterior cuff when the arm is in a slightly abducted position vs by the side; therefore, we advocate the use of a towel roll under the arm when in a resting position or when performing isometric/isotonic RC TB exercises.
- 2. The RC muscles are very small; therefore, we use lower intensities to isolate each muscle without recruitment from surrounding larger muscles. Focus on hypertrophy initially by high volume (V= Reps X intensity/weight). Following the hypertrophy phase, strength is the focus with lower reps and higher intensities/weight.
- 3. Closed chain rotator cuff exercises facilitate cuff strength and shoulder proprioception. Like closed chain exercises for the knee, these can be safely initiated early in the post op course.
- 4. Do not exceed ROM guidelines

Additional Procedure Precautions

Remplissage

NO active ER strengthening x12 weeks

NO IR/cross body stretch x12 weeks

No pushing motions

No grade 3 or 4 posterior joint mobilization x12 weeks

Latarjet

No joint mobilization > grade 1 until 6+ weeks

No anterior mobilizations

No cross body stretch x12 weeks

PHASE 1: Early Postop Week 1-3

GOALS OF PHASE 1

Protect and promote healing of repaired tissue

Control pain and inflammation

Gradual increase of ROM - do not exceed guidelines

Independent in HEP

BRACE/SLING

To be worn at for 4-6 weeks per Dr Shybut (default is 4 weeks)

Brace to be worn while sleeping

Can be removed for exercises only

PRECAUTIONS

No Active shoulder ROM / No shoulder AAROM for 2 weeks

ROM: Gradual † Passive ROM in scapular plane

Avoid excessive adduction and IR

* No active IR if subscapularis repair

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EXERCISES

Passive Pendulum exercises – keep circles very small, monitor and teach proper technique

ER with cane (not to exceed 30° of ER at 45° abduction)

AA flexion supine

Gentle posterior capsular stretch (week 3)

Seated and/or supine scapular retractions – perform every hour

Shoulder shrugs

Active elbow ROM all planes as tolerated

Grip strengthening using ball or putty

MANUAL

STM to decrease pain and muscle spasm

PROM all planes except extension adhering to limitations

MODALITIES

Moist heat 10-15 min prior to exercise

Ice 10-15 min following exercise and as needed

E-stim/TENS for pain as needed

US as needed

CRITERIA TO PROGRESS

90 degrees shoulder PROM forward elevation

20 degrees of shoulder PROM ER in the scapular plane

0 degrees of shoulder PROM IR in the scapular plane

Palpable muscle contraction felt in scapular and shoulder musculature

No complications with Phase I

PHASE 2: WEEK 4-6

GOALS OF PHASE

Control pain and inflammation

Initiate light RC muscle contraction

Gradual increase in ROM / Minimize substitution patterns with AAROM

Initiate light scapular stabilizer contraction

Continue to protect surgical repair

Patient education

BRACE/SLING

Per MD discretion (usually d/c at week 4)

PRECAUTIONS

No lifting of objects

No supporting of body weight with hands

ROM

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Pendulum exercise

AA Flexion supine – gradually progress

ER with cane

Posterior capsule stretch

Initiate towel IR stretching

Rope/Pulley (flex/scaption)

STRENGTH

Continue grip strengthening as needed

Initiate submaximal pain-free isometrics week 4

Supine Active flexion without resistance with elbow flexed progress to elbow extended

Rows and shrugs with theraband

Row on physioball, extension on physioball

Washcloth press

Scapula clocks

Supine protraction

Supine and side-lying rhythmic stabilization

Initiate TB IR/ER week 6

Standing flexion and scaption – only if good scapulo-humeral rhythm

Side-lying ER AROM progress to dumbbell

Initiate UBE without resistance at week 4

Body blade with elbow flexed, arm by side moving into IR/ER

Prone rows

MANUAL THERAPY

STM as needed

Continue PROM

Initiate Grade I joint mobilization

MODALITIES

Moist heat 10-15 min prior to exercise

Ice 10-15 min following exercise and as needed

E-stim/TENS for pain as needed

US as needed

CRITERIA TO PROGRESS

120 degrees shoulder PROM forward elevation

90 degrees shoulder abduction

30 degrees shoulder PROM ER in scapular plane and in abduction

45 degrees of shoulder PROM IR in the scapular plane

Minimal substitution patterns with AAROM

Pain < 4/10

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^{*} NO resisted IR until week 6 if subscapularis repair

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No complications with Phase II

PHASE 3: WEEK 7-9

GOALS OF PHASE

Minimize shoulder pain

Gradually increase shoulder PROM/AAROM

Initiate shoulder AROM

Improve scapular muscle activation

Patient education

PRECAUTIONS

No heavy lifting, no throwing

ROM

PROM: Forward elevation up to 150, IR at 90 Abd up to 60 degrees, ER at 20 Abd to 60, ER at 90

Abd to 70

AAROM: seated shoulder elevation with cane, seated incline table slides, ball roll on wall

AROM: elevation < 120, supine flexion, salutes, supine punch, wall climbs

STRENGTH

Continue grip strengthening as needed

Continue Phase II exercises

Introduce light upper body exercises

Periscapular: Resistance band shoulder extension, resistance band seated rows, rowing, lawn

mowers, robbery, serratus punches

Initiate scapular retraction/depression/protraction

Initiate Thrower's 10 program

Dynamic resistance with PNF patterns and manual techniques

Introduce closed kinetic chain exercises w wall/table weight shifts

MANUAL THERAPY

STM as needed

Continue PROM

Grade I-II joint mobilization

MODALITIES

Moist heat 10-15 min prior to exercise

Ice 10-15 min following exercise and as needed

E-stim/TENS for pain as needed

US as needed

CRITERIA TO PROGRESS

ROM close to guidelines above

Minimal substitution patterns with AROM

Pain < 3/10

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PHASE 4: Week 10-12

GOALS OF PHASE

Gradual increase shoulder PROM / AAROM / AROM to near full

Improve dynamic shoulder stability

Progress periscapular strength

Gradual return to functional ADLs

ROM

Gradual progression to full PROM -> AAROM -> AROM

STRENGTH

Continue with all strengthening from previous phases increasing resistance and repetition

Manual rhythmic stabilization exercises in standing at 90° flex/scapation

Supine punches with resistance

Prone shoulder extension

Prone scaption

Prone ER with abduction

Initiate D1/D2 PNF patterns in standing

Push-up progression – start at week 8 on wall

UBE for endurance training

Bicep/Tricep work

Body blade – multi-planar

Continue earlier phase interventions / exercises

MANUAL

Initiate Grade II-IV joint mobs as needed

Continue to gradually progress PROM

Continue STM as needed

MODALITIES

MHP as needed

Ice 10-15 minutes

Ultrasound as needed

CRITERIA TO PROGRESS

Full pain-free PROM / AROM

Minimal to no substitution patterns w shoulder AROM

Perform all exercises with symmetric scapular mechanics and minimal pain (<2/10)

Appropriate scapular posture at rest and dynamic scapular control during exercises & ROM

PHASE 5: WEEK 12-16

GOALS OF PHASE

Maintain pain free ROM

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Build strength, endurance, neuromuscular control, power

Initiate motor control exercise

Enhance functional use of UE

STRENGTH

Advanced istotonics

Initiate 2-handed plyometrics e.g. chest pass

Periscapular T and Y; W exercise, resistance band Ws, dynamic hug, resistance band dynamic hug

IR and ER in scaption and flex 90-125 rhythmic stabilization

Continue push up progressions

Quadruped alternating isometrics and ball stabilization on wall

PNF D1 diagonal lifts -> D2 diagonal lifts

Light dumbbell pec exercises

CRITERIA TO PROGRESS

Near full pain-free PROM and AROM

ER/IR strength minimum 80% uninvolved arm

ER/IR ratio 60% or more

Negative instability signs

Performs all exercises demonstrating symmetric scapular mechanics

PHASE 6: Weeks 17-24+

GOALS OF PHASE

Maintain pain-free ROM

Continue strengthening and motor control development

Enhance functional use of upper extremity

Maximize upper extremity strength and endurance

Maximize neuromuscular control

Optimize shoulder mechanics/kinematics

Optimize core stability

Gradual return to strenuous work / sporting activities

Initiate sports specific training/functional training

STRENGTH:

Progress strengthening program with increase in resistance and high speed repetition

UBE high resistance for endurance

IR/ER exercises at 90° abduction

Progress rhythmic stabilization activities to include standing PNF patterns with tubing

Initiate single arm plyotoss (ball toss, ball on wall)

Eccentric RC strengthening

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Initiate military press, bench press, flys, lat pulldowns week 16+ (do NOT let elbow extend past plane of thorax)

Initiate sport specific drills and functional activities

Initiate interval throwing program week 16-20 – consult with Dr. Shybut first*

Initiate light upper body plyometric program week 16-20

Progress isokinetics to 90° abduction at high speeds

MANUAL

Grade III-IV joint mobs as needed for full ROM Full PROM

MODALITIES

MHP as needed

Ice 10-15 minutes

Ultrasound as needed

GOALS

Full functional activities for RTP
Optimize neuromuscular control
Optimize power, strength, endurance
Muscular strength 90+ % of contralateral side
Full functional AROM
5/5 periscapular and rotator cuff strength

CRITERIA TO PROGRESS

For athletes and people performing strenuous manual tasks, return-to-sport or return-to-activity decision making should be individualized and based upon factors including level of demand on the upper extremity, contact / collision vs non contact sport, frequency and intensity of participation, etc. We encourage close discussion with the patient and surgeon and physical therapist prior to advancing return to sport progressions.

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