Nonsurgical Rehabilitation for Multidirectional Shoulder Instability

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This protocol provides general guidelines for initial stage and progression of rehabilitation according to specified time frames, related tissue tolerance and directional preference of movement. The intent is to provide the therapist with a general framework.

The program will vary in length for each individual depending on several factors:

- Severity of injury.
- Acute versus chronic condition.
- ROM/strength status.
- Performance/activity demands.

Return to sport criteria:

- Absence of pain
- Full range of motion
- Little to no apprehension
- Imaging with magnetic resonance imaging (MRI) may be considered in the patient evaluation, depending upon individual presentation.

Phase 1: Acute Motion Phase

Goals

- Decrease Pain and Inflammation

Therapeutic modalities

- Ice
- Electrotherapy
- Gentle joint mobilization.

Range of Motion Exercises

- Pendulums
- Circumduction
- Rope and Pulley
- Flexion
- Abduction to 90°, progress to full ROM
- L-Bar
  - Flexion
  - Abduction
  - Internal rotation with arm in scapular plane.
External rotation with arm in scapular plane. (progress arm to 90 degrees of abduction as tolerated)
- Posterior capsular stretching.
- Upper extremity ergometer.
- Reestablish nonpainful ROM.
- Retard muscular atrophy.
- Decrease pain/inflammation.

Shoulder hyperextension is contraindicated.

**Strengthening Exercises**
- Isometrics
- Flexion
- Abduction
- Extension
- Internal rotation (multiangles)
- External rotation (scapular plane)
- Weight shifts (closed-chain exercises)

**Criteria for Progression to Phase 2**
- Full ROM.
- Minimal pain of tenderness.
- “Good” MMT of internal rotation, external rotation, flexion, and abduction.

**Phase 2: Intermediate Phase**

**Goals**
- Initiate Isotonic Strengthening
- Flexion
- Abduction to 90°
- Side-lying external rotation to 45°
- Shoulder shrugs
- Extension
- Horizontal Adduction
- Supraspinatus
- Biceps
- Push-ups

**Initiate Eccentric (Surgical Tubing Exercises at 0° Abduction)**
- Internal rotation
- External rotation

**Normalize Arthrokinematics of the Shoulder Complex**
- Continue joint mobilization.
- Patient education of mechanics and activity modifications of activity/sport.

**Improve Neuromuscular Control of Shoulder Complex**
• Initiation of PNF
• Rhythmic stabilization drills
• Regain and improve muscular strength.
• Improve neuromuscular control of shoulder complex.

Continue Use of Modalities (As Needed)

Criteria for Progression to Phase 3
• Full nonpainful ROM.
• No palpable tenderness.
• Continued progression of resistive exercises.

Phase 3: Advanced Strengthening Phase
Goals
Capsular Stretches
• Address joint imbalances as necessary
Continue Use of Modalities (As Needed)
Continue Isotonic Strengthening (Progressive Resistance Exercises)
Continue Eccentric Strengthening
Emphasize PNF
Initial Isokinetics
• Flexion-extension
• Abduction-adduction
• Internal-external rotation
• Horizontal abduction/adduction
Initiate Plyometric Training
• Surgical tubing
• Wall push-ups
• Medicine ball
• Boxes
Initiate Military Press
• Precaution—avoid excessive stress on anterior capsule.

Criteria for Progression to Phase 4
• Full ROM.
• No pain or palpable tenderness.
• Satisfactory isokinetic test.
• Satisfactory clinical examination.

Phase 4: Return to Activity Phase
• Improve strength, power, and endurance.
• Improve neuromuscular control.
• Prepare patient/athlete for activity.

Goals
• Maintain optimal level of strength, power and endurance.
• Progressively increase activity level to prepare patient for full functional return to activity/sport.

Continue All Exercises as in Phase 3 Continue Capsular Stretches
Initiate Interval Program
Continue Modalities (As Needed)
  • Follow-up Isokinetic test.
  • Progress interval program.
  • Maintenance of exercise program.

This protocol provides you with general guidelines for the patient undergoing multidirectional shoulder instability.

Specific changes in the program will be made by the physician as appropriate for the individual patient.

Questions regarding the progress of any specific patient are encouraged, and should be directed to Dr. Tabaddor at 401-789-1422, ext. 104.