The following posterior stabilization guidelines are based on both criteria-based and patient specific progression. This program emphasizes early, controlled motion to prevent contractures and to avoid excessive passive stretching later in the protocol.

Internal rotation and horizontal adduction are avoided early and then progressed cautiously to avoid excessive stress of the posterior capsule.

Emphasis will be placed on the posterior glenohumeral and scapular musculature to further assist in protecting the posterior labral complex. The program is based on the patient returning to sport-specific activities no earlier than 16 weeks post-surgery, with overhead activities and contact sports progressed last.

## <u>POST-OPERATIVE PHASE I: Week 2-4</u>

| | |
|---|---|
| GOALS | <ul><li>Promote healing: reduce pain, inflammation and swelling</li><li>Elevation in plane of scapula: to 90·</li><li>External Rotation: to 30·</li><li>Initiate restoration of humeral head and scapular control</li><li>Independent home exercise program</li></ul> |
| PRECAUTIONS | <ul><li>Immobilizer at all times when not exercising</li><li>Internal Rotation and Horizontal Adduction limited to neutral</li></ul> |
| TREATMENT RECOMMENDATIONS | <ul><li>AAROM elevation in plane of scapula to 90· ER to 30</li><li>Scapular mobility and stability<ul><li>Side-lying, progressing to manual resistance</li></ul></li><li>Sub-max deltoid isometrics in neutral (3-4 weeks)</li></ul> |

|  |  |
|---|---|
|  | <ul><li>Sub-max RC isometrics in neutral (3-4 weeks)</li><li>Elbow/wrist AROM and gripping exercises</li><li>Modalities for pain and edema as needed</li><li>Emphasize patient compliance to HEP and protection during ADLs</li></ul> |
| EMPHASIZE | <ul><li>PROTECTING SURGICAL REPAIR</li><li>Limiting horizontal adduction and IR to neutral</li><li>Patient compliance with sling immobilization</li></ul> |
| MINIMUM CRITERIA FOR ADVANCEMENT TO NEXT PHASE | <ul><li>External Rotation to 30· Minimal pain or inflammation</li></ul> |

## POST-OPERATIVE PHASE II: Week 4-6

| | |
|---|---|
| GOALS | <ul><li>Continue to promote healing</li><li>Elevation in plane of scapula to 90· Internal Rotation to 45· Begin to restore rotator cuff strength to 4/5</li></ul> |
| PRECAUTIONS | <ul><li>Limit Internal rotation to 45· Horizontal adduction limited to neutral</li><li>Protect posterior capsule</li><li>Avoid rotator cuff inflammation</li></ul> |
| TREATMENT RECOMMENDATIONS | <ul><li>Discontinue immobilizer (MD directed)</li><li>AAROM elevation in plane of scapular and ER</li><li>Progress scapular strengthening protecting posterior capsule (modify closed chain exercises)</li><li>Sub-maximal isometrics ER/IR</li><li>Sub-maximal deltoid isometrics</li><li>Modalities for pain and edema, prn</li><li>Progress HEP</li></ul> |
| EMPHASIZE | <ul><li>PROTECTING SURGICAL REPAIR</li></ul> |

|  | <ul><li>Monitoring ROM</li><li>Avoiding excessive stretch to posterior capsule</li><li>Avoiding inflammation of rotator cuff</li></ul> |
|---|---|
| MINIMUM CRITERIA FOR ADVANCEMENT TO NEXT PHASE | <ul><li>Minimal pain and inflammation</li><li>Elevation in plane of scapula to 90· Internal rotation/ external rotation</li><li>Strength atleast 4/5</li></ul> |

## POST-OPERATIVE PHASE III: Weeks 6-12

| | |
|---|---|
| GOALS | <ul><li>Restore full shoulder range of motion</li><li>Restore normal scapulohumeral rhythm throughout ROM</li><li>Upper extremity strength 5/5</li><li>Restore normal UE flexibility</li><li>Isokinetic IR/ER strength 85% of unaffected side</li></ul> |
| PRECAUTIONS | <ul><li>Avoid rotator cuff inflammation</li><li>Continue to protect posterior capsule</li><li>Avoid excessive passive stretching</li></ul> |
| TREATMENT RECOMMENDATIONS | <ul><li>Initiate AAROM IR</li><li>Continue AAROM for ER</li><li>Continue elevation in plane of scapula</li><li>Continue progressive scapula strengthening, protecting posterior capsule</li><li>Initiate IR/ ER in modified neutral</li><li>Begin latissimus strengthening</li></ul> |

|  | |
|---|---|
| | <ul><li>Begin scapula plane elevation when RC and scapula strength is adequate</li><li>Humeral head stabilization exercises</li><li>PNF patterns if IR/ ER is 5/5</li><li>Isokinetic training and testing</li><li>UE endurance (UBE)</li><li>Initiate flexibility exercises, modalities prn</li><li>Modify HEP</li></ul> |
| EMPHASIZE | <ul><li>PROTECTING SURGICAL REPAIR</li><li>Avoiding excessive passive stretching</li><li>Avoiding inflammation of rotator cuff</li><li>Establishing normal scapula and rotator cuff strength base</li></ul> |
| MINIMUM CRITERIA FOR ADVANCEMENT TO NEXT PHASE | <ul><li>Pain-free</li><li>Full upper extremity range of motion</li><li>Normal scapulohumeral rhythm</li><li>Normal upper extremity flexibility</li><li>IR/ER strength 5/5</li><li>Isokinetic IR strength 85% of unaffected side</li></ul> |

## POST-OPERATIVE PHASE IV: Week 12-18

| | |
|---|---|
| GOALS | ▪ Restore normal neuromuscular function<br>▪ Maintain strength and flexibility<br>▪ Isokinetic IR/ER strength = to the unaffected side<br>▪ > 66% Isokinetic ER/IR strength ratio<br>▪ Prevent Re-injury |
| PRECAUTIONS | ▪ Pain free plyometrics<br>▪ Significant pain with a specific activity<br>▪ Feeling of instability<br>▪ Avoid loss of strength and instability<br>▪ Avoid overtraining |
| TREATMENT RECOMMENDATIONS | ▪ Full UE strengthening emphasizing eccentrics<br>▪ UE flexibility program<br>▪ Advance ER/IR strength to 90/90 position (overhead athlete)<br>▪ Isokinetic training and testing<br>▪ Continue endurance training |

| | |
|---|---|
| | ▪ Initiate plyometrics and sport and activity related program<br>▪ Address trunk and LEs as needed<br>▪ Modalities prn<br>▪ Modify HEP |
| EMPHASIZE | ▪ Eccentric strengthening for overhead athlete<br>▪ Elimination of strength deficits<br>▪ Restoration of ER/IR strength ratio<br>▪ Restoration of flexibility to meet demands of sport activity |
| MINIMUM CRITERIA FOR DISCHARGE | ▪ Pain free sport or activity specific program<br>▪ Isokinetic IR/ER strength at least equal to unaffected side<br>▪ > 66% Isokinetic ER/IR strength ratio<br>▪ Independent Home Exercise Program<br>▪ Independent sport or activity specific program |
| | |