Shoulder Coracoid Transfer/Glenoid Bone Grafting for Glenohumeral Anterior Instability POST-OPERATIVE PHYSICAL THERAPY PROTOCOL

Diagnosis: Glenohumeral instability with bone loss Frequency: 2-3 visits/week Duration: 4 months

Post-operative Period

0 to 1 month:

- 1. 2 to 3 visits per week, everyday home program with goals
- 2. Sling is to be worn at all times, including for sleep, except when doing exercises
- 3. Sling may be discontinued at 4 weeks
- 4. No active shoulder motion
- 5. Modalities as needed
- 6. Active and passive range of motion of the neck, elbow, wrist and hand should be performed 3 to 5 times/day everyday
- 7. Wrist 6-way exercises
- 8. Gentle passive pendulum/Codman's exercises can be started immediately and performed 3 times a day
- 9. Gentle passive elevation in the scapular plane to 90 degrees in neutral rotation and external rotation (arm at side) to 30 degrees (no pulleys!)
- 10. Submaximal scapular isometric exercises
- 11. Submaximal and subpainful deltoid and external rotation isometrics
- 12. Avoid any active abduction, forward elevation, and external rotation during this time period
- 13. Cryotherapy should be performed several times a day (at least 5 times/day)

1 to 2 months:

1. 2 to 3 visits per week, 5 times a week home program

- 2. Continue all exercises in previous phase (as described above)
- 3. Passive and active assisted range of motion can begin with limits to 140 degrees of abduction (no external rotation with arm abducted) and forward elevation, external rotation of 45 degrees with arm at the side only (no abduction while externally rotating), and extension to 40 degrees
- 4. Active scapular 4-way motion
- 5. Supported biceps/triceps active exercises (light resistance only)
- 6. Submaximal, subpainful internal rotation isometrics
- 7. Focus on establishing normal scapulohumeral kinematics
- 8. Begin isometric shoulder strengthening exercises including internal and external rotation with arm at side

2 to 4 months:

- 1. 2 to 3 visits per week, with a home program 5 times a week.
- 2. Continue exercises in previous phases (as described above) and focus on normal scapulohumeral kinematics
- 3. Passive, active assisted, and active range of motion exercises should be slowly increased to full motion.
- 4. Advance isometric shoulder strengthening exercises including internal and external rotation, abduction, extension, forward flexion
- 5. Initiate isotonic periscapular strengthening 4-way exercises
- 6. Pool exercises to include shoulder abduction, internal and external rotation, forward elevation
- 7. Rotator cuff strengthening exercises (with bands and dumbbells) may begin once active range of motion is full
- 8. Goal is scaption to 180° and external rotation to 90° by 12 weeks
- 9. Range of motion should be normal by the end of this phase.

4 to 6 months:

- 1. 4 to 5 times a week home program. 1 to 2 visits per week to advance home program.
- 2. Continue exercises in previous phases (as described above)
- 3. Range of motion must be full in order to begin this phase of rehabilitation.
- 4. Pool exercises can be advanced with paddles
- 5. Begin advanced training with shoulder girdle, rotator cuff, and periscapular muscle strengthening exercises with the emphasis to regain full strength. Strengthening exercises should be high repetition, low weights with dumbbells and bands
- 6. Avoid wide grip bench press or behind the neck military press or lat pulldown (always have elbows in front of body)

6 to 8 months:

- 1. 3 to 5 times a week home program. May need physical therapy supervision for functional training.
- May begin functional training exercises including swimming, tennis, or an interval throwing program (if a thrower)
- 3. Begin gradual return to previous sports/activities/work duties under controlled conditions

4. Full return to sports/activities/full work duties are pending Dr. Kellum's approval based upon the following criteria:

Criteria for Return to Sports/Full Activities:

- 1. Full functional range of motion
- 2. No pain or tenderness
- 3. Satisfactory clinical examination