



## **Subacromial Balloon Spacer or Biotuberoplasty Rehabilitation Protocol**

The following is a basic framework from which to work during rehabilitation following implantation of the Stryker InSpace™ subacromial balloon spacer or Arthrex biologic tuberoplasty for the treatment of full thickness, massive, irreparable rotator cuff tears. Every patient is different, so the time points are just guidelines – the emphasis should be on achieving the milestones of each phase prior to advancing to the next phase. If other concomitant procedures were performed (i.e. biceps tenodesis, distal clavicle excision, etc.) please reference those additional protocols as well to create a patient-specific program. Please feel free to communicate with our office with any questions or concerns.

### **Phase I – Early Motion Phase | 0-3 Weeks**

- Must use Sling for 10 days
- Passive (PROM) to Active Assisted shoulder ROM (AAROM), as tolerated

#### **Day 1**

- Elbow, wrist, and hand exercises
- Sling use

#### **Day 10–14**

- Discontinue sling use
- Pendulum (Codman), rope and pulley, AAROM supine, deltoid isometrics
- Isometrics: internal rotation (IR), external rotation (ER), & deltoid
- Passive ROM progressing to active ROM (AROM) 90° of flexion
- External rotation with arm at side to tolerance: AAROM & PROM
  - No rotation with arm in abduction until 4 weeks
  - With distal clavicle excision, hold cross body adduction until 8 weeks
  - Avoid abduction and 90/90 ER until at least 6 weeks

#### **Week 3**

- Modified Abduction (Bar) AAROM (30° abduction progress to 45°), seat table slides – flexion only
- Strengthening: advance to resistance bands as tolerated – IR, ER, and rowing with arms at side

### **Phase II – ROM Progression Phase | 4-7 Weeks**

#### **Week 4**

- Progress AROM flexion in supine (Goal 90–145°)
- Progress resistance bands:
  - Shoulder extension
  - Scapula retraction
  - Lower trapezius exercise (ER/IR with arm at side)



**Week 5**

- Progress AROM flexion as tolerated-standing (goal to overhead motion)

**Week 6**

- Initiate side lying light dumbbell

**Phase III - Dynamic Strengthening Phase | 8-12 Weeks**

**8–9 Weeks**

- Advance to standing, painless flexion to 90° AROM (with light weight)
- Initiate AROM full flexion in scapular plane 160°-180°

**9–12 Weeks**

- Continue strengthening as tolerated to normal ADLs
- \*Only do strengthening 5–6 times/week, no more than once daily, to avoid overuse
- \*Perform AROM exercises 2-3 times per day, use arm for functional daily activities in pain-free ROM

**Phase IV- Return to Activity Phase | > 12 Weeks**

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- Continue with Fundamental Maintenance Exercise Program of AROM, strengthening and returning to physical ADLs and sport such as golf, hiking, cycling etc.

**Fundamental Maintenance Exercise Program**

- Collapsible bar exercises (external/internal rotation)
- Active assisted flexion in the supine position
- Resistance band exercises
  - External/internal rotation,
  - Horizontal abduction with elbows bent,
  - Lower trapezius
  - Rowing
- Standing active flexion & extension exercise
- Active forward flexion (standing with weight)