

TYPE II TEARS

PHASE I (Surgery to 3 weeks after surgery)

Appointments	<ul style="list-style-type: none"> • Rehabilitation appointments begin 5-8 days after surgery
Rehabilitation Goals	<ul style="list-style-type: none"> • Patient education on pathology, procedure, rehabilitation expectations and expected time frame for return to function, precautions • Normalize scapular positioning and mobility • Reduce pain and swelling in the post-surgical shoulder • Maintain AROM of the elbow, wrist and neck • Minimize loads placed over healing repair
Precautions	<ul style="list-style-type: none"> • Use sling continuously except while doing therapy • No AROM • No lifting or supporting body weight with hands • Relative rest to reduce inflammation
Suggested Patient Education	<ul style="list-style-type: none"> • Explain surgical procedure • Importance of tissue healing to maximize functional outcomes, including sling use • Discuss modification of ADLs and sleeping posture in order to follow post-operative precautions • Absence of pain does not correlate with lack of stress on the repair
Suggested Therapeutic Exercise	<ul style="list-style-type: none"> • Elbow, wrist and neck AROM • Ball squeezes • PROM for forward elevation in the plane of the scapula to maximum of 70°. Passive motion should be relatively pain free and assessed for compensation or guarding. Exercises demonstrated to have ≤ 15% EMG activity level. <i>*See appendix for pictures and descriptions</i> <ul style="list-style-type: none"> • Supine PROM • Forward bow • Scapular protraction with ball on table • Towel slide • PROM for ER in ~20° of abduction with ≤ 15% EMG activity level <ul style="list-style-type: none"> • Supine PROM • Supine active assisted ER with cane
Cardiovascular Fitness	<ul style="list-style-type: none"> • Walking and/or stationary bike with sling on • No treadmill, elliptical or hiking • Avoid running and jumping due to the repetitive traction forces that can occur at landing
Progression Criteria	<ul style="list-style-type: none"> • At least 3 weeks post-operative • Passive forward elevation 50-60° • Passive ER to 10-15° at 20° of abduction

Rehabilitation Guidelines for Rotator Cuff Repair Type II

PHASE II (begin after meeting Phase I criteria, usually 3-4 weeks after surgery)

Appointments	<ul style="list-style-type: none"> • If PROM deficit is present with pain as primary barrier appointments should be 1 time per week until pain well controlled • If PROM deficit is present with stiffness as primary barrier appointments should be 2 times per week with HEP performed at least 3 times per day
Rehabilitation Goals	<ul style="list-style-type: none"> • Progression of elevation in scapular plane • Correct postural dysfunctions
Precautions	<ul style="list-style-type: none"> • Sling utilization continuously for 6 weeks except for physical therapy and daily hygiene. • Modifications may be made by communication between physician and physical therapist. Typical sling use ranges from 6-8 weeks depending on surgical procedure, tissue quality, healing potential, and stiffness. • No AROM
Suggested Therapeutic Exercise	<ul style="list-style-type: none"> • Progress passive forward elevation and passive ER using only exercise demonstrated to have $\leq 15\%$ EMG activity level. <i>*See appendix for pictures and descriptions</i> <ul style="list-style-type: none"> • Supported side lying shoulder flexion • Supine forward elevation with elastic band resistance from 90° • Small circle (20 cm) pendulums • Scapular strengthening • Sternal lift • Modified shoulder dump • Grade I and II joint mobilizations for pain relief as needed at all shoulder girdle joints GH, SC, AC, ST • Elbow, wrist, finger AROM and light strengthening • Ensure normal cervical spine, thoracic spine, and hip mobility to facilitate kinetic chain upper extremity ROM
Cardiovascular Fitness	<ul style="list-style-type: none"> • Walking and stationary bike • No treadmill or Stairmaster • Avoid running and jumping due to the repetitive traction forces that can occur at landing
Progression Criteria	<ul style="list-style-type: none"> • At least 8 weeks post-operative • Passive forward elevation 60-90° • Passive ER to 20° at 20° of abduction

PHASE III (begin after meeting Phase II criteria, usually 8-9 weeks after surgery)

Appointments	<ul style="list-style-type: none"> • Appointments should be 2 times per week until integrity has been determined and AROM goals met • If AROM deficit present without lag signs appointments should be 1 time per week until AROM goals met
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Rehabilitation Guidelines for Rotator Cuff Repair Type II

Rehabilitation Goals	<ul style="list-style-type: none"> • ROM goals for approximately 10 weeks <ul style="list-style-type: none"> • Passive forward elevation to at 120-145° • Passive ER at 20° of abduction to 25-35°. Passive ER at 90° of abduction to at 40-60° • Controlled progression of AAROM and AROM. AROM initiation based on PROM goals, delayed 9 weeks post-op • Initiate light muscle performance activities • Correct postural dysfunctions • Active elevation 80-100° without compensation
Precautions	<ul style="list-style-type: none"> • Sling use as needed. • No active abduction ROM for 9-10 weeks to protect repair and no external resistance to abduction and supraspinatus for 14 weeks • If AROM deficit is present with lag signs surgeon should be notified re: concerns about repair integrity
Suggested Patient Education	<ul style="list-style-type: none"> • Appropriate progression of upper extremity use for light ADLs in pain free ROM starting with waist level activities, progression to shoulder level • Avoid quick, sudden movements and heavy lifting
Suggested Therapeutic Exercise	<ul style="list-style-type: none"> • AAROM for forward elevation and ER with exercises demonstrated to have $\leq 30\%$ EMG activity level. Generally in gravity minimized positions and/or short lever arm. <i>*See appendix for pictures and descriptions</i> <ul style="list-style-type: none"> • Cane assisted forward elevation • Wall ball roll • Active assisted forward elevation with fingers interlaced • Wall walks or slide • Aquatic exercise: slow speed elevation in scapular plane • ROM exercises in other planes can be initiated in latter half of this phase if significant ROM limitations are present (caution with passive tension over the repair) <ul style="list-style-type: none"> • ER at progressing angles of abduction • IR • Functional IR behind the back • Horizontal adduction
Cardiovascular Fitness	<ul style="list-style-type: none"> • Walking and stationary bike • No treadmill, Stairmaster or swimming • Avoid running and jumping due to forces that can occur at landing
Progression Criteria	<ul style="list-style-type: none"> • Passive forward elevation to at least 140-150° • Passive ER at 20° of abduction to at least 30° to full. Passive ER at 90° of abduction to at least 70° to full • Active elevation to at least 120° without compensation • Appropriate static and dynamic scapular positioning

Rehabilitation Guidelines for Rotator Cuff Repair Type II

PHASE IV (begin after meeting Phase III criteria, usually 14-16 weeks after surgery)

Appointments	<ul style="list-style-type: none"> • Rehabilitation appointments are once every 1-2 weeks
Rehabilitation Goals	<ul style="list-style-type: none"> • Normal (rated 5/5) rotator cuff strength and endurance at 90° of shoulder abduction and scaption • Advance proprioceptive and dynamic neuromuscular control retraining • Correct postural dysfunctions with work and sport specific tasks • Develop strength and control for movements required for work or sport
Precautions	<ul style="list-style-type: none"> • Post-rehabilitation soreness should alleviate within 12 hours of the activities
Suggested Therapeutic Exercise	<ul style="list-style-type: none"> • Multi-plane shoulder AROM with gradual increase in the velocity of movement being sure to assess scapular rhythm • Shoulder mobilizations as needed • Rotator cuff strengthening in 90° of shoulder abduction, and overhead (beyond 90° of shoulder abduction) • Scapular strengthening and dynamic neuromuscular control in OKC and CKC positions • Core and lower body strengthening
Cardiovascular Fitness	<ul style="list-style-type: none"> • Walking, stationary bike, and Stairmaster • No treadmill or swimming • The patient may begin running if they have normal (rated 5/5) strength for the shoulder internal rotators and external rotators at 30° of shoulder abduction and normal shoulder AROM
Progression Criteria	<ul style="list-style-type: none"> • Not all patients will progress to Phase V. Individuals that are involved in sports and physical labor will be progressed, those that are not should continue with progressive, low velocity loading. • Full shoulder AROM in all planes and multi-plane movements • Manual muscle testing (MMT) of 5/5 in neutral • Pain free during strengthening exercises • Negative impingement signs

Rehabilitation Guidelines for Rotator Cuff Repair Type II

PHASE V (begin after meeting Phase IV criteria, usually 20-24 weeks after surgery)

Appointments	<ul style="list-style-type: none"> • Rehabilitation appointments are 1 time every 2-3 weeks
Rehabilitation Goals	<ul style="list-style-type: none"> • Normal (rated 5/5) rotator cuff strength at 90° abduction • Normal (rated 5/5) supraspinatus strength • Advance proprioceptive and dynamic neuromuscular control retraining • Correct postural dysfunctions with work and sport specific tasks • Develop strength and control for movements required for sport/work • Develop work capacity cardiovascular endurance for sport/work
Precautions	<ul style="list-style-type: none"> • Post-rehabilitation soreness should alleviate within 12 hours of the activities
Suggested Therapeutic Exercise	<ul style="list-style-type: none"> • Multi-plane shoulder AROM with a gradual increase in the velocity of movement being sure to assess scapular rhythm • Shoulder mobilizations, as needed • Rotator cuff strengthening in 90° of shoulder abduction in provocative and/or sport/work specific positions, including eccentric strengthening, endurance and velocity specific exercises • Scapular strengthening and dynamic neuromuscular control in overhead positions and work or sport specific positions • Sport and work specific strengthening • Core and lower body strengthening • Begin education in sport specific biomechanics with an initial program for throwing, swimming or overhead racquet sports as needed • Transition to a specific throwing program or swimming program once the patient can demonstrate good control with the desired mechanics
Cardiovascular Fitness	<ul style="list-style-type: none"> • Use exercise to replicate energy systems needed for work or sport
Progression Criteria	<ul style="list-style-type: none"> • The patient may return to sport after receiving clearance from the orthopedic surgeon and the sports rehabilitation provider. Return to sport decisions are based on meeting the goals of this phase