GOLDEN ORTHOPAEDIC
Knee,Hip,Shoulder & Foot Center
The Center of Excellence for Joint Care
Appointments Call
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Arthroscopic Rotator Cuff Repair Protocol:

The intent of this protocol is to provide the therapist and patient with guidelines for the post-operative rehabilitation course after arthroscopic rotator cuff repair. This protocol is based on a review of the best available scientific studies regarding shoulder rehabilitation. It is by no means intended to serve as a substitute for one's clinical decision making regarding the progression of a patient's post-operative course. It should serve as a guideline based on the individual's physical exam/findings, progress to date, and the absence of post-operative complications. If the therapist requires assistance in the progression of a post-operative patient they should consult with Dr. Kephart.

VITAL: All patients are immobilized in sling for first 6 weeks after surgery. Active elbow flexion and extension are allowed with the arm at the side. At 6 weeks post operatively, the sling is discontinued, and passive external rotation upright and passive forward flexion and abduction supine are begun. At 16 weeks post operatively (compared to 12 weeks for small and medium tears), passive internal rotation and strengthening are initiated. Full return to activity is allowed at 12 months for massive tears and 6 months for small to medium tears, including all sporting activities.

Progression to the next phase based on Clinical Criteria and/or Timeframes as appropriate.

Phase I– Immediate Post Surgical
NO SHOULDER MOTION (Weeks 1-6):

Goals: Maintain / protect integrity of repair
Preserve range of motion of elbow only with arm at the side (PROM and AROM)
Diminish pain and inflammation
Prevent muscular inhibition
Become independent with activities of daily living with modifications and without use of involved shoulder

DAYS 1 TO 6:

- Abduction brace/sling
- Finger, wrist, and elbow AROM
- Begin scapula musculature isometrics / sets; cervical ROM
- Cryotherapy for pain and inflammation
  -Day 1-2: as much as possible (20 minutes of every hour)
  -Day 3-6: post activity, or for pain
- Sleeping in abduction sling
- Patient Education: posture, joint protection, positioning, hygiene, etc.
- May resume general conditioning program – walking, stationary bicycle, etc. (WHILE IN SLING)

DAYS 7-42:

- Continue use of abduction sling / brace
- Pendulum exercises
- Begin passive ROM to tolerance (these should be done **supine** and should be relatively pain free)
  - Flexion to 90 degrees
  - ER in scapular plane to at least 35 degrees
  - IR to body/chest
- Continue Elbow, wrist, and finger AROM / resisted
- Cryotherapy as needed for pain control and inflammation
- Gentle Aquatherapy / pool therapy may begin at 8 weeks postop

Phase II– Protection / Passive motion (Weeks 6-12):

Goals: Maintain / protect integrity of repair
Allow healing of soft tissue
Gradually increase passive range of motion (PROM) in Flexion, external rotation, and Abduction only
Diminish pain and inflammation
Prevent muscular inhibition
Do not overstress healing tissue
Decrease pain and inflammation

Precautions:
At 6 weeks **DISCONTINUE** abduction sling / brace
ALL PASSIVE FLEXION AND ADBUCTION MOTION BEGUN IN SUPINE POSITION
Extreme limitations of active-assisted range of motion (AAROM) of shoulder in SUPINE POSITION
No lifting of objects
No shoulder motion behind back
No excessive stretching or sudden movements
No supporting of any weight
No lifting of body weight by hands
No stretching in internal rotation or adduction

Criteria for progression to the next phase (III):
Passive forward flexion to at least 125 degrees
Passive external rotation (ER) in scapular plane to at least 75 degrees
Passive Abduction to at least 90 degrees in the scapular plane

- May resume general conditioning program – walking, stationary bicycle, etc.
- Aquatherapy / pool therapy may begin at 10 weeks postop

WEEK 6-7:

- Continue use of sling/brace full time until end of week 6

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- Between weeks 6 and 7 may use sling/brace for comfort only
- Discontinue sling/ brace at end of week 7
- Initiate passive range of motion (PROM) flexion in supine position
- Progressive passive ROM until approximately Full PROM in flexion, External rotation and Abduction at Week 10-12.
  -Gentle Scapular/glenohumeral joint mobilization as indicated to regain full passive ROM
- Initiate prone rowing to neutral arm position
- Continue cryotherapy as needed
- May use heat prior to ROM exercises
- Ice after exercise

Weeks 9 - 12

- Begin active assisted ROM and stretching exercises
- Continue rotator cuff isometrics
- Continue periscapular exercises
- Initiate active-assisted ROM exercises
  - flexion scapular plane - Supine
  - abduction - Supine
  - external rotation – Upright and Supine
  - internal rotation - NONE

Phase III – Early strengthening and passive internal rotation (weeks 12 - 18):

Start 12 weeks: Small to Medium Tears
Start 16 weeks: Large to Massive Tears

Goals: Allow healing of soft tissue
Do not overstress healing tissue
Gradually restore full PROM and AROM including internal rotation and adduction (week 12-18)
Decrease pain and inflammation

Precautions:
Lifting to be supervised by Physical Therapist
No lifting heavier than 5 pounds
No supporting of body weight by hands and arms
No sudden jerking motions
Avoid upper extremity bike or upper extremity ergometer at all times.

Weeks 12-15:

Goals: Full active ROM (week 10-15)
Maintain full passive ROM
Dynamic shoulder stability
Gradual restoration of shoulder strength, power, and endurance
Optimize neuromuscular control
Gradual return to functional activities

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Precautions:

No heavy lifting of objects (no heavier than 5 lbs.)
No sudden lifting or pushing activities
No sudden jerking motions
No overhead lifting
Avoid upper extremity bike or upper extremity ergometer at all times.

Criteria for progression to the next phase (IV):

Able to tolerate the progression to low-level functional activities
Demonstrates return of strength/dynamic shoulder stability
Re-establish dynamic shoulder stability
Demonstrates adequate strength and dynamic stability for progression to higher demanding work/sport specific activities.

WEEK 16:

- Continue stretching and passive ROM (as needed)
- Dynamic stabilization exercises
- Initiate strengthening program
  - External rotation (ER)/Internal rotation (IR) with therabands/sport cord/tubing
  - ER side-lying (lateral decubitus)
  - Lateral raises*
  - Full can in scapular plane* (avoid empty can abduction exercises at all times)
  - Prone rowing
  - Prone horizontal abduction
  - Prone extension
  - Elbow flexion
  - Elbow extension

*Patient must be able to elevate arm without shoulder or scapular hiking before initiating isotonics; if unable, continue glenohumeral joint exercises

WEEK 18:

- Continue all exercise listed above
- Initiate light functional activities as Dr. Kephart permits
- Progress to all fundamental shoulder exercises

Phase IV – Advanced strengthening (weeks 18-48):

Full Return to Sports: Week 24 for Small to Medium Tears
Full Return to Sports: Week 48 for Large to Massive Tears

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Goals: Maintain full non-painful active ROM
Advance conditioning exercises for enhanced functional use
Improve muscular strength, power, and endurance
Gradual return to full functional activities

WEEK 18-24:

- Continue ROM and self-capsular stretching for ROM maintenance
- Continue progression of strengthening
- Advance proprioceptive, neuromuscular activities
- Light sports (golf chipping/putting), if doing well at 16 - 20 weeks (small to medium tears)

WEEK +20:

- Continue strengthening and stretching
- Continue stretching, if motion is tight
- May initiate interval sport program (i.e. golf, doubles tennis, etc.), if appropriate.

- **Full Return to Sports: Week 24 for Small to Medium Tears**

- **Full Return to Sports: Week 48 for Large to Massive Tears**

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