

ROTATOR CUFF REPAIR REHAB PROTOCOL

Please correlate with operation note for patient specific post-operative plan base on intra-operative findings. Rehab protocol may be adjusted according to extent of injury, quality of soft tissue and repair.

0-6 Weeks

- First 2 weeks - focus on pain management
 - Sling immobilisation (with or without abduction pillow)
 - Cryotherapy/ice pack and adequate analgesia
 - Active hand and wrist range of motion, grip strengthening
 - Passive/active assisted elbow range of motion (flexion/extension) to protect LHB tenodesis, active pronosupination. (Active elbow range of motion for LHB tenotomy/release without reattachment)
- After 2 weeks or once pain settles
 - Passive shoulder range of motion (forward flexion to 90° and external rotation to 45°) - supine or pendular leaning over table/chair (ensure small passive pendular circles once in position)
 - Periscapular strengthening with arm in neutral position
 - Focus on posture and scapular retraction
 - Cryotherapy/ice pack after exercises
- After 4 weeks
 - Introduce gentle pain-free submax isometric shoulder exercises – adduction, external rotation, flexion, extension from neutral sling position against wall/chair/armrest/body

After 6 weeks – focus on regaining range of motion

- Wean out of sling (continue use for safety depending on environment)
- Continue with above, increasing passive and active assisted ROM
 - Forward flexion to tolerance
 - External rotation to tolerance
 - Internal rotation up to beltline: no aggressive stretching
- Criteria to advance to active range of motion
 - Pain-free passive ROM
 - Forward flexion beyond 120°
 - External rotation beyond 45°
- Aim to gradually work onto active ROM as pain allows from week 10
- Goal is to regain full active ROM by week 12

- Continue with pain-free submax isometric exercises as above
- No heavy lifting/strengthening until week 12
- Continue periscapular strengthening, focusing on posture and scapular retraction

After 12 weeks – start gradual strengthening guided by pain

- Continue with above
 - o Forward flexion unrestricted
 - o External rotation unrestricted
 - o Internal rotation unrestricted
- Criteria to advance to strengthening
 - o Full, pain-free PROM
 - o Full AROM without compensation (shoulder shrug)
 - o Pain-free isometric exercises
- Gradual strengthening with TheraBand and weights of all cuff in all directions (flexion/extension/adduction/abduction/IR/ER)
- Continue periscapular strengthening, focusing on posture and scapular retraction

After 14 weeks

- Work and sport specific strengthening
 - o Functional rehab

Follow-up appointments:

- 1 nights in hospital
- 2 weeks clinic for wound check
- 6 weeks clinic with Mr Francis Ting
- 12 weeks clinic with Mr Francis Ting

Initial phases of rehabilitation emphasise on tissue healing, reduction of inflammation and pain, and protection of repair. Immediately after surgery, patients are placed in a sling for 6 weeks. Pain and inflammation have been reported to cause muscle atrophy so efforts should be made to use cryotherapy/ice packs and adequate analgesia.

Appropriate range of motion after surgery is important to minimise risk of post-operative stiffness. Safe, proper exercise progression should be followed to limit stress on healing repair.

The healing process can be divided into three stages: inflammation (0-7 days), repair (5-14 days) and remodeling (>14 days). Mature tendon-to-bone healing present in animal studies by 15 weeks after surgery, so avoid excessive tension on repair for 12 weeks post-surgery.