REHABILITATION PROTOCOL
FOR SHOULDER JOINT REPLACEMENT

Physiotherapy Guidelines
This is a guideline for your physiotherapist to help you progress your shoulder rehabilitation over the next 12 weeks so that you can achieve a functional shoulder. A physiotherapist who is experienced in shoulder rehabilitation should be consulted throughout the programme to teach and individually modify your programme.

Immobilization/Movement Restrictions

<table>
<thead>
<tr>
<th>Wear sling/immobilizer</th>
<th>During the day: __________ weeks. At night: __________ weeks.</th>
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<td>Additional restriction of range of motion required</td>
<td>YES: Motion: __________ Restriction: __________ NO</td>
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Post Operative Programme

1-14 Days

Manual Physiotherapy
Heat may be utilized prior to exercise.
Ice may be applied post exercise.
Gentle massage around the shoulder girdle, trigger points; supraspinatus, infraspinatus and biceps belly.

Range of Motion Exercise
Pendular exercises:
- Flexion, extension, circular, horizontal flexion/extension-respecting pain.
- Arms supported or hanging, whatever is most comfortable.
  • (Arm may need to be in neutral rotation if internal rotation compresses the biceps)

2-4 Weeks

Active assisted ROM exercises:
- ER/IR performed supine, arm supported in slight flexion (so that arm doesn’t fall into extension), in 20° - 30° abduction.

Occupational & Recreational Activity Return

Computer: 2-4 weeks.
Exercise Bike: 4-6 weeks (in sling) 6 weeks onwards out of sling.
Road Bike: 6 months
Gardening: 12 weeks below shoulder height. Overhead – 4 months or longer.
Run: 6-8 weeks or 2 weeks after out of sling.
Golf: 4 months (lighter irons). Chip / putt as determined by physiotherapist / surgeon.
Gym: 6-12 months. Some weight / exercise restrictions apply. Check with physiotherapist.
Heavy lifting – below shoulder height: Discuss with surgeon / physiotherapist.
Swim: 6-12 months (with a kickboard).
Tennis: 6-12 months. Discuss with surgeon / physiotherapist. May not be realistic due to pathology.
Throw: 6-12 months. Discuss with surgeon / physiotherapist.

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Flexion to 90°. Initially therapist provides assistance by supporting arm, especially with arm lowering.
- May commence in supine but if too painful continue with pendular exercises only.
- Patient eventually should be able to cradle their arm with the other side, set shoulder blade back and assist arm up. Re-set shoulder blade prior to commencing lowering. May need to keep the arm in neutral rotation to avoid biceps compression.
- Aim is for 60° - 90° (max) flexion by end of the fourth week, do not force.

Elbow ROM:
- Flexion / extension exercises.
- Pronation / supination.

Wrist ROM:
- Flexion / extension.

Strengthening Exercises
Isometric scapula setting drills only:
Scapula elevation, retraction, depression.

Hand Strength:
Gripping.

Precautions/Dosages
No isometric glenohumeral exercises.
Exercises performed 3 times per day – or as pain determines.
Usually stretches are held for a count of 5 and repeated 10 times dependent on pain. Do not hold if any pain.

4-6 Weeks

Range of Motion Exercises
Active assisted exercises are performed with the assistance of the other arm or with the assistance of a stick.

Active assistance ROM exercise progressed:
- ER/IR still performed in supine with arm supported. Performed in 20° - 30° abduction.
- 30° of motion of External and Internal or as tolerated – never force.
- Flexion of 90° - 120° (max) as tolerated, do not force.

6-8 Weeks

Range of Motion Exercises
- ER/IR range progressed to 45° if tolerated or able, (some patients will not achieve full range of motion), arm supported on towel, progress arc of motion to full as tolerated.
- Supine flexion commenced with a stick as tolerated but may still need to be performed cradling arm.
- Range of flexion over head progressed as tolerated to 120° (often elbow is required to be bent slightly).

8 Weeks

Strengthening Exercises
Sub-maximal pain free isometric exercises:
- Extension with elbow bent (care arm doesn’t go back past body).
- ER/IR may need to perform in plane of the scapula (only performed on non-repaired rotator cuff).
- Only perform sub-maximal glenohumeral isometric exercises if no night pain present. If night pain present then leave till 6 weeks post-operation or when night pain settles.
- Perform all exercises with elbow bent, sub-maximal resistance <30% MVC.

Dosage
- Perform 2 times a day.
- Most exercises are held for a count of 5 and repeated to a maximum of 20 repetitions.
- Stretches may be held for longer durations as required up to a count of 15 seconds, usually 10 repetitions.
- Whilst the assisted active EROM exercises are progressed here, expect that the range may come out gradually over the next 12 weeks and never should be forced.

8-12 Weeks

Range of Motion Exercises
- Continue with all exercises outlined in weeks 4-6.
- May utilize more advanced stretches such as longer duration holds, sidelying stretching over head with a stick, sliding arm out along the bed or preacher stretches (patient kneeling on ground, arms supported on chair or table while patient leans back onto their haunches) as tolerated.
- ER/IR may gradually be progressed into higher ranges of abduction.
- Supine assisted active abduction may gradually be commenced but care not to force the motion or create any impingement pain by pushing the motion too far.
- Be aware not all patients achieve full range of motion due to limitation of pathology +/- prosthesis
- Check with surgeon for realistic range limits.

Strengthening Exercises
- Supine flexion – arm supported on towel to prevent arm dropping into extension – lift up only 30° (may initially require assistance).
- Sidelying external rotation – arm supported on towel, 0° abduction. May initially require support of forearm on pillow or books. Limit arc of motion initially.
- Shoulder shrugs – add weight as tolerated.
- Supine internal rotation (arm supported by a rolled up towel to prevent arm dropping into extension) 0° abduction – Theraband or standing – internal rotation at 0° abstraction – Theraband pull from position or external rotation into internal rotation of 0° - 10°.
- Bent over rows in neutral to 30° abduction (do not go past the level of the body).
- Biceps / triceps
- All resisted exercises are performed below shoulder height for the first 8-10 weeks post operation.