

Post-Operative Shoulder Rehabilitation

These multidisciplinary guidelines form the basis of a progressive rehabilitation programme. These are general guidelines for the most common shoulder surgical procedures and are not designed to replace sound clinical reasoning. Any specific instructions from the consultant orthopaedic team either verbally or in post-operative notes must take precedence.

Rehabilitation Goals

- Preserve the integrity of surgical repair
- Restoration of functional range of movement
- Restoration of Rotator Cuff (RC) and scapula control through range
- Restore proprioceptive acuity
- Prevent compensatory movement patterns that may compromise recovery

Principles of Post-operative shoulder rehabilitation

The following should be considered at all times throughout the rehabilitation process:

- Good communication with the consultant team is paramount to a successful outcome for the patient.
- Comprehensive pain control should be in place and supported prior to discharge from hospital. Patients should be educated regarding appropriate levels of pain, particularly in response to exercise to reduce fear and anxiety.
- Cervical spine, elbow, wrist and hand activity should be maintained throughout.
- Quality of movement should not be sacrificed in the pursuit of range.
- Progression should follow the basic principles of rehabilitation from passive (PROM), active assisted (AAROM), active (AROM), isometric and resistance training.
- Rehabilitation programmes should only include 2-4 exercises. Too many exercises will affect adherence.
- Consider using short lever movements or closed kinetic chain (CKC) positions in appropriate situations.
- Consider incorporating functional movements whenever possible – for example use of the hand for specific occupational or sports activities.
- Functional milestones are for guidance only. Patients should not be accelerated through time markers without discussion with a member of the consultant team. Similarly, range, control and strength goals must be met before patients are deemed ready for progression, regardless of whether or not they have reached the time marker.
- The law states that patients **MUST** be in full control of a car before returning to driving. It is the patient's responsibility to ensure this and to inform their insurance company of their surgery.

Criteria for progression

Criteria for progression of exercise should always be based on:

- Ability to perform a movement with the correct movement pattern
- The patient being able to maintain good rotator cuff and scapula control – there should be no evidence of significant scapula winging or humeral head translation.
- Evidence that movement can be performed without compensatory muscle patterning (particularly Pectoralis Major and Latissimus Dorsi)

After ultrasound guided barbotage for calcific tendonitis

	Day 0	0-2 weeks	2-4 weeks	4-6 weeks	6-12 weeks	12 weeks +
Advise	<p>No formal period of immobilisation</p> <p>Neck/elbow/wrist/hand movements</p> <p>Pendular exercises</p> <p>Active assisted/supported exercises e.g.:-</p> <ul style="list-style-type: none"> • Table slides • Walk backs • Supine short lever flexion 	<p>Exercises can include:-</p> <ul style="list-style-type: none"> • Closed kinetic chain • Proprioceptive • Isometric Rotator Cuff 	<p>Progress RC and Scapula recruitment through range</p> <p>Progress kinetic chain integration</p>	<p>Progress RC and Scapula recruitment through range</p> <p>Progress kinetic chain integration</p>	<p>Restore optimal cuff and scapula control both through range and under load</p> <p>Focus on power/strength/endurance only if normal neuromuscular control can be achieved</p>	
Avoid	<p>AVOID:-</p> <ul style="list-style-type: none"> • Heavy lifting • Sustained/repeated overhead activities 					

Key clinical points

- There are no specific time scales for progression but decisions should be based on:-
 - Neuromuscular control through range
 - Strength
 - Endurance
 - Pain / symptom response
- Be aware of associated procedures that may affect expected progression such as AC Joint excision, biceps tenotomy/tenodesis or longstanding RC tendinopathy