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SOLENT MSK PHYSIOTHERAPY APPRECIATES PATIENTS PROGRESS AND OUTCOMES WILL VARY. CLINICAL REASONING THROUGHOUT THE REHABILITATION PROCESS IS EXPECTED. THESE GUIDELINES ARE MILESTONE DRIVEN AND SHOULD HELP GUIDE PATIENTS AND THERAPIST WHEN SPECIALIST REVIEW IS REQUIRED.

# **Rotator Cuff Repairs**

## **Post-operative Rehabilitation Guidelines**

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#### Indications for surgery:

<65 year old traumatic onset, full thickness and partial thickness tear – proven on USS

>65 years old – for consideration of co-morbidities, failed conservative management +/-Subacromial injection to consider for pain and function

<65 degenerative tear – for pain if significant PTT or FTT

Usually not indicated if >75 years old

Surgery only indicated for pain

#### Surgical techniques:

Open or Arthroscopically.

Arthroscopic subacromial decompression followed by debridement and repair/ reattachment of tendon.

Following the surgery the surgeon will inform the physiotherapist as to whether the patient can proceed with a **slow**, **standard or accelerated programme**. This is dependent on the size of the tear, the quality of the tendon and how challenging the cuff was to repair during surgery.

## IF THE CONSULTANT HAS NOT STIPULATED ON THE POST OP NOTES THE PHYSIOTHERAPIST WILL FOLLOW THE STANDARD PROGRAMME.

#### **Possible complications:**

Stiffness Infection Persistent Pain Failure of Repair Frozen shoulder Neuropraxia 3

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#### Orthopaedic referral to physiotherapy:

- Always check the operation notes, and the post-operative instructions. Discuss any deviation from routine guidelines with the team concerned.
- Orthopaedic team to refer to commence outpatient physiotherapy at 2 weeks

#### **Recovery rehabilitation phase: 0-6 weeks**

#### Goals:

- 1. Be aware the first 6 weeks is a cautionary stage to maintain integrity of the cuff repair
- 2. Maintain upper limb, spinal and scapula mobility
- 3. Maintain strength in the shoulder girdle
- 4. Prevent post operative stiffness at the shoulder
- 5. To be independent with sling use.

#### **Restrictions:**

- ✤ Work within patient's level of pain
- Sling as per op note
- Do not push external rotation beyond neutral except accelerated group
- No driving or return to work

#### Treatment:

- 1. Ensure patient is confident with sling use both with application and removal
- 2. Ensure adequate analgesia
- 3. Ice packs
- 4. Maintain elbow, hand and wrist ROM and strength
- 5. Maintain scapula/thoracic mobility including postural awareness

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- 6. Sling removal for exercises
- 7. External rotation to neutral only in standard and slow
- 8. Commence gentle pendular exercises out of sling

	Slow	Standard	Accelerated
Shoulder girdle/elbow/wrist /hand mobility	1	✓	1
Neck and thoracic ex	✓	✓	1
Scapula setting in sling	$\checkmark$	✓	1
Scapula setting out of sling E.g. scapula dump	✓	✓	✓
Sling removal for exercise	✓	✓	1
Passive External rotation	✓ To neutral only	✓ To neutral only	✓ Beyond neutral as comfort allows – do not force
Pendulum exs	1	1	1
Passive Exercises	x	2 weeks	2 weeks
Act Assisted	x	Table rolls/ ball rolls from 2 weeks	Table rolls/ ball rolls from 2 weeks
Isometric exercises in neutral ( to start 2 weeks after removal of sling as a general guideline)	x	x	4 weeks



Removal Sling	6 weeks	4 weeks	2 weeks
As per op notes			

#### Milestones to progress to next phase:

- Pain well controlled
- Patient out of sling

#### Intermediate rehabilitation phase 6-12 weeks

#### Goals:

- 1. Accelerated and Standard groups to commence resisted exercises
- 2. Slow group to commence active assisted ROM exercises

#### **Restrictions:**

- Driving 8-10 weeks (standard)
- Return to manual work to be discussed with consultant

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- No heavy lifting
- No upper limb sports

#### Treatment:

- 1. Patient managing independently out of sling
- 2. Slow group to commence active assisted ROM
- Standard and accelerated group working on graded strengthening of cuff
   Consider hydrotherapy if appropriate
- 5. Consider introducing proprioceptive work

	Slow	Standard	Accelerated
Scapula setting out of sling/ lower traps exs	✓	1	1
Sling removal (as per op notes)	✓	1	1
Passive External rotation	✓ FR beyond neutral within comfort	✓ ER beyond neutral within comfort	✓ ER beyond neutral within comfort
Pendulum exs	1	1	1
Active Assisted exercises	6 weeks Table rolls/ ball rolls	1	1
Active exercises	x	8-10 weeks	6 weeks
Isometric exercises	8 12 weeks	6 weeks	1
Resisted exercises	x	10 – 12 weeks	8-10 weeks

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Modified weight bearing exercises – against wall / on table	x	x	8-10 weeks
Proprioception exercises and Rhythmic stabilization exercises	x	✓	✓
Lower limb strengthening and core	✓	✓	<ul> <li>Image: A start of the start of</li></ul>
Hydrotherapy (if required and following discussion with hydro team)	12 weeks	8-10 weeks	6 weeks if wound healed

#### Milestones to progress to next phase:

Full ROM



#### Late Rehabilitation phase: 3 months - 6 months

#### Goals:

- 1. Full strength of the rotator cuff in standard and accelerated groups
- 2. Return to non-contact sport discuss with consultant
- 3. Encourage full ROM in the slow group and start resisted work/proprioception
- 4. Progression of proprioception and core stability to functional tasks
- 5. ACCELEARTED AND STANDARD GROUPS: Challenge the kinetic chain drills / plyometric work both UL and LL
- 6. Sport specific rehab where appropriate

	Slow	Standard	Accelerated
Stretches including into external rotation	1	1	1
Active exercises	1	1	1
Isometric exercises	1	1	1
Resisted exercises	12 weeks	1	1
Modified weight bearing exercises – against wall / on table	12 weeks	✓ 	1
Weight bearing exercises – progressing to floor work	Progress with caution as able after 12 weeks	1	1

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Proprioception exercises		•	1
Lower limb strengthening and core	✓	✓ ✓	1
Hydrotherapy	✓	1	1
Sport specific work	Guided by consultant as challenging repair	Drills/ plyometric work / increasing patient confidence to get back to contact sports at 6/12 after discussion with ortho	Drills/ plyometric work / increasing patient confidence to get back to contact sports at 6/12 after discussion with ortho

#### Milestones for discharge:

- Return to required function for patient
- Patient independent with their home exercise program

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#### Sport and Occupation Specific phase: 6-9 months

On an individual basis you may be rehabilitating a patient for return to a specific sport or occupation. Consider extending rehabilitation to include to following:

- Sports specific drills
- High level cuff strengthening
- Proprioception
- Plyometric work
- Kinetic chain and core

#### Failure to progress:

Consider Problem	Action
Severe post-op pain	Ensure adequate analgesia Clear cervical spine/neurology Modify exercises and starting position Discuss with Band 7/8 Communicate with Orthopaedics

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Failure to repair	Reassure patient – may re-tear without change in clinical signs and symptoms Modify exercises Discuss with B7/8 if concerned ? progression of exercises Communicate with Orthopaedics
Stiffness post op	Reassurance Adequate analgesia Consider Frozen shoulder Discuss with B7 /8 Communicate with Orthopaedics
Wound bleeding and signs of infection	Contact on call Orthopaedic registrar

#### References / Extra sources of information & support:

- 1. Reading shoulder Unit
- 2. Shoulderdoc.co.uk