

Plymouth TSR Rehabilitation Protocol

Phase	1. Protection & Education
Time Frame	0 to 3 weeks post procedure
Key Goals	<ul style="list-style-type: none"> • Protect the prosthesis • Education of patient regarding post-operative precautions and importance of adherence to and compliance with rehabilitation programme • Achieve AAROM up to 90° flexion and 90° elevation in scaption with arm in IR and 0° ER • Reduce pain • Prevent compensatory/ poor movement patterns
Avoid	<ul style="list-style-type: none"> • Combined abduction and external rotation • Resisted internal rotation • WB through operated arm when getting out of bed or chair and when using walking aids • Lifting with the operated arm • Extension, HBB/ IR • Forcing any movement • Increasing pain
Interventions	<ul style="list-style-type: none"> • Educate patient in relation to timescales, precautions and sling management • Introduce AROM elbow, wrist, hand exercises from day 1 • Introduce Shoulder Active Assisted Range of Movement (AAROM) Exercises After check X-ray cleared and once nerve block has worn off start AAROM Flexion up to 90°, elevation in scaption with arm in IR up to 90°, ER to 0° • Introduce gentle isometrics (<30% MVC) except for internal rotation • Introduce simple scapula mobilisation exercises e.g. shoulder shrugs • Ensure good scapular/GHJ dissociation • Correct any abnormal movement patterns • Encourage light functional use of hand in sling
Notes	<p>SLING: Sling to be worn for comfort and to protect the subscapularis repair, usually for 3 weeks until post-operative pain starts to settle. If surgery performed post fracture or there is poor cuff function sling may be worn for up to 6 weeks. Make sure patient is aware of restrictions to ROM described above during this time. Sling can be removed for axillary hygiene & to exercise. Use sling when out in crowds for 4-6 weeks post-operatively.</p> <p>SLEEP POSITION: Patient to sleep supine with operated arm on pillow to prevent the arm falling into hyperextension. Wear sling at night.</p> <p>NERVE BLOCK: Ensure nerve block has worn off before starting AAROM shoulder exercises.</p> <p>CRYOTHERAPY: Consider use of cryotherapy as necessary if tolerated.</p>

Phase	2. Control through Range
Time Frame	From 3 weeks post procedure
Criteria to commence stage	<ul style="list-style-type: none"> • Pain controlled • No signs of instability • Integrity of subscapularis • No abnormal movement patterns • Good isometric cuff contraction
Key Goals	<ul style="list-style-type: none"> • Regain functional active shoulder ROM • Control pain • Optimise dynamic control through range • Prevent poor movement patterns
Avoid	<ul style="list-style-type: none"> • Stressing the subscapularis repair • External rotation beyond 0° • Resisted internal rotation • WB through the operated arm • Combined abduction/external rotation • HBB • Lifting (limit to weight of cup & essential ADL's such as eating, brushing teeth etc)
Interventions	<ul style="list-style-type: none"> • Wean out of sling • Continue AAROM exercises, and progress ROM • May commence Active Range of Movement (AROM) exercises: if pain free with good quality movement & no signs of instability • Educate patient and promote appropriate shoulder girdle mechanics with AAROM/AROM exercises • From 4 weeks if pain controlled & good quality movement may begin HBB (do not force) • Encourage functional use of arm at waist height for light tasks • Continue gentle isometrics (<30% MVC) to include gentle isometric IR if pain free from 4 weeks
Notes	<ul style="list-style-type: none"> • SLING: if pain settled discontinue use of sling indoors but can continue to use outdoors in crowds for up to 6 weeks

Phase	3. Strengthening & Function
Time Frame	From 6 weeks post procedure
Criteria to commence stage	<ul style="list-style-type: none"> • Pain free, well controlled functional AROM • Good cuff & scapular function through available range • Good shoulder mechanics/ movement quality • No signs of instability • Active external rotation control • Subscapularis function
Key Goals	<ul style="list-style-type: none"> • Regain functional AROM • Regain function specific strength and endurance • Increase functional use/ independence • Ensure continued good shoulder mechanics/ movement patterns
Avoid	<ul style="list-style-type: none"> • Heavy lifting • WB through the operated arm • Forced external rotation • Forced internal rotation against resistance • Forced HBB • Combined abduction & external rotation
Interventions	<ul style="list-style-type: none"> • Introduce rotator cuff resistance exercises through range (including subscapularis from 8 weeks) progress as comfort permits • Consider deltoid rehab if poor cuff function • Increase functional use as able • Regain external rotation ROM (do not force) • Include kinetic chain exercises if appropriate • Functional movement re-education specific to patients demands • Educate patient with regards long term management strategies
Notes	<ul style="list-style-type: none"> • See treatment progression below

A.CONSIDERATIONS:

Treatment Progression	<ul style="list-style-type: none">• Improvements can continue for up to 2 years• Rate of progression and outcome can depend on a number of factors including patient age, their pre-op status and cuff status
Return to functional Activity	<ul style="list-style-type: none">• Patient can consider return to the following activities providing pain has settled and they have good cuff function• Swimming: breaststroke from 8 weeks• Golf: from 3 months• Sedentary work from 8 weeks• To avoid manual work for 6 months