

## Plymouth Anterior Shoulder Stabilisation Rehabilitation Protocol

Phase	<b>1. Protection &amp; Education</b>
Time Frame	0 to 6 weeks post procedure
Key Goals	<ul style="list-style-type: none"> <li>• Protection of surgical repair</li> <li>• Minimise shoulder pain &amp; inflammation</li> <li>• Patient understanding of appropriate post-operative management and restrictions</li> <li>• Range of Movement (ROM) goals: <b>At 6 weeks post procedure</b> achieve a comfortable passive and active assisted range of movement equal to: Between 90° to 135° of forward flexion Between 30° to 45° of external rotation in a neutral shoulder position (0° to 20° of scaption or abduction).</li> </ul>
Avoid	<ul style="list-style-type: none"> <li>• <b>Any activity or exercise</b> that requires <b>combined abduction and external rotation of the affected shoulder</b></li> <li>• Active Range of Movement (AROM) exercises or activities involving the affected shoulder (<b>see Latarjet notes below</b>)</li> <li>• Activities or exercises that encourage a shoulder range of movement beyond that indicated in the key goals section</li> <li>• <b>Any stretching</b>, forceful or painful activities involving the affected shoulder</li> </ul>
Interventions	<ul style="list-style-type: none"> <li>• <b>Educate patient</b> in relation to sling use, precautions and importance of avoiding activities that stress the capsulo-labral repair/stabilisation.</li> <li>• Introduce Shoulder <b>Passive Range of Movement (PROM) exercises</b> Include: Elevation in the scapular plane. <b>Avoid elevation beyond 90° during the first 3 weeks.</b> External rotation with the shoulder resting in a neutral Position. <b>Avoid external rotation beyond 30° during the first 3 weeks</b></li> <li>• Introduce sub-maximal <b>isometric activity for the Rotator Cuff</b> in a neutral position</li> <li>• Introduce sub-maximal <b>isometric activity for the deltoid muscle</b></li> <li>• Introduce <b>scapular setting</b> (with the shoulder in a neutral position)</li> <li>• Introduce Active Range of Movement (AROM) exercises for elbow, wrist and hand of affected side</li> <li>• Introduce AROM exercises for the neck</li> </ul> <p><b>At 3 weeks post procedure:</b></p> <ul style="list-style-type: none"> <li>• introduce <b>Active <u>Assisted</u> Range of Movement (AAROM) exercises for the affected shoulder</b></li> </ul>
Notes	<ul style="list-style-type: none"> <li>• <b>Sling Immobilisation:</b> The patient must maintain the upper limb in a sling at all times except for hygiene and for physiotherapy directed exercises. (<b>See Latarjet notes below</b>)</li> <li>• See <b>Anterior Shoulder Stabilisation Surgical Variation notes below</b></li> </ul>

Phase	<b>2. Control through Range</b>
Time Frame	From 6 weeks post procedure
Criteria to commence stage	<ul style="list-style-type: none"> <li>• Minimal pain 0 – 3/10 on Numerical Pain Rating Scale (NPRS)</li> <li>• ROM goals achieved for stage 1</li> </ul>
Key Goals	<ul style="list-style-type: none"> <li>• ROM Goals: At 12 weeks post procedure the patient should aim to achieve a comfortable passive and active range of movement comparable to that of the unaffected side (within normal limits). With the exception of combined external rotation with the shoulder in 90° of abduction.</li> </ul>
Avoid	<ul style="list-style-type: none"> <li>• <b>Stretching into horizontal abduction or with the shoulder in a combined abducted and externally rotated position</b></li> <li>• <b>Any other forceful or painful stretching</b> of the affected shoulder</li> </ul>
Interventions	<ul style="list-style-type: none"> <li>• Continue with PROM/AAROM exercises to achieve the stage 2 ROM goals.</li> <li>• Introduce <b>Active Range of Movement (AROM) Exercises</b> involving the affected shoulder</li> <li>• Introduce a progressive <b>Rotator Cuff Strengthening</b> programme. Commence with the shoulder positioned in less than 45° of scaption. Strengthening should involve low resistance with high repetition.</li> <li>• Progress <b>Scapular Recruitment</b> exercises with emphasis on scapular retractors and upward rotators.</li> <li>• Promote <b>appropriate shoulder girdle mechanics during exercises and activities of daily living (ADLs)</b></li> <li>• Commence <b>Neuromuscular Retraining/Proprioceptive exercises</b> for the shoulder. These may be commenced with closed kinetic chain/weight bearing exercises (<u>avoid</u> press-ups).</li> <li>• Introduce <b>Cervical and Thoracic Spine Mobility</b> exercises</li> <li>• Introduce <b>Core Stability exercises</b> (important for patients with generalised low tone) including postural awareness</li> </ul>
Notes	<ul style="list-style-type: none"> <li>• The patient may <b>wean from the sling/immobilisation</b> as comfort permits</li> <li>• Monitor and address any inappropriate muscle patterning of the affected shoulder</li> <li>• See <b>Anterior Shoulder Stabilisation Surgical Variation notes below</b></li> </ul>

Phase	<b>3. Strength &amp; Endurance</b>
Time Frame	From 12 weeks post procedure
Criteria to commence stage	<ul style="list-style-type: none"> <li>• Strengthening and ROM exercises are being undertaken without pain</li> </ul>
Key Goals	<ul style="list-style-type: none"> <li>• Prepare the patient for return to usual ADLs.</li> <li>• Prepare patient to commence work, sport and recreational activity specific training</li> </ul>
Avoid	<ul style="list-style-type: none"> <li>• Any painful exercises, activities or stretches</li> </ul>
Interventions	<ul style="list-style-type: none"> <li>• Address ROM deficits with low load prolonged <b>stretching and joint mobilisation if required</b>. Include <b>posterior shoulder stretches (horizontal <u>adduction</u> stretches)</b> where tightness or restriction into internal rotation is present</li> <li>• <b>Progress rotator cuff strengthening and endurance exercises</b> with the shoulder <b>through range and into a combined abducted and externally rotated position with the shoulder</b></li> <li>• <b>Progressive neuromuscular control/proprioceptive exercises</b> through range and into a combined abducted and externally rotated position with the shoulder</li> <li>• Introduce <b>general strengthening for the affected upper limb</b> if required for ADLs/sport or recreation. Avoid Latissimus pull downs and military press with the bar behind the head. Avoid triceps dips. Avoid push-ups or supine bench press with elbows at less than a 90° angle until 16 weeks post procedure.</li> <li>• Undertake exercises that <b>incorporate the kinetic chain</b>, including the lower limbs</li> </ul> <p><b>After 16 weeks post procedure:</b></p> <ul style="list-style-type: none"> <li>• incorporate multiplanar activities with increasing speed in preparation to commence functional/sports specific activities <u>where appropriate</u></li> </ul>
Notes	<ul style="list-style-type: none"> <li>• Continue to monitor and address any inappropriate muscle patterning or shoulder girdle mechanics</li> <li>• Reinforce with the patient the importance of <b>gradually</b> increasing stress to the shoulder while returning to normal ADLs, work and recreational activities</li> <li>• See <b>Anterior Shoulder Stabilisation Surgical Variation notes below</b></li> </ul>

Phase	<b>4. Return to Function/Sport</b>
Time Frame	From 20 weeks post procedure
Criteria to commence stage	<ul style="list-style-type: none"> <li>• No pain at rest or with exercises</li> <li>• No sensation of instability with exercises and activities</li> <li>• A sufficient ROM, comparable to the unaffected side, without inappropriate shoulder girdle mechanics</li> <li>• At least 3 weeks of tolerance to high speed, multi-planer activities</li> <li>• The patient must demonstrate confidence, control and endurance with shoulder through range including into a combined abducted and externally rotated position with the affected shoulder</li> </ul>
Key Goals	<ul style="list-style-type: none"> <li>• Facilitate the patient's return to usual ADLs and recreational activities including sport</li> </ul>
Avoid	<ul style="list-style-type: none"> <li>• Latissimus dorsi pull downs and the military press with the <u>bar behind the head</u> as well as triceps dips are not recommended for this population</li> </ul>
Interventions	<ul style="list-style-type: none"> <li>• Introduce <b>functionally relevant/sports specific exercises</b></li> <li>• Patient may gradually return to overhead sports, throwing, swimming and golf</li> <li>• Patient may return to non-contact/non-collision sports drills</li> <li>• Introduce plyometric exercises <u>only as necessary</u>. Perform no more than 3 times per week. Emphasis on quality not quantity.</li> </ul>
Notes	<ul style="list-style-type: none"> <li>• Patient must <b>avoid contact &amp; collision type activities for a minimum of 6 months post stabilisation</b></li> </ul>

<b>Anterior Shoulder Stabilisation Surgical Variation</b>	
<b>Latarjet Stabilisation Only</b>	<ul style="list-style-type: none"> <li>• The patient <b>may wean from the sling/shoulder immobilisation <u>within the first week post procedure as comfort permits</u></b></li> <li>• The patient <b>may undertake AROM exercises <u>immediately post procedure without restriction as comfort permits</u></b></li> <li>• Regaining external rotation following a Latarjet procedure can be slower than the timescales offered above.</li> </ul>
<b>Latarjet and Open Stabilisation</b>	<ul style="list-style-type: none"> <li>• Monitor the sub-scapularis with any external rotation stretches and with resisted internal rotation exercises. These exercises <u>must</u> be pain free. It is important that strength and function is restored to the sub-scapularis during the rehabilitation programme.</li> </ul>