

OUTPATIENT POST-OPERATIVE PHYSIOTHERAPY GUIDELINES

Anterior Stabilisation

Please remember, each individual patient progresses differently and progression onto the next level should be based on clinical judgement.

This protocol is for use with patients who have had a routine Anterior stabilisation. If a patient has had any additional or unusual procedures, post-operative notes will need to be adhered to.

The procedure is normally arthroscopic and will involve some form of soft tissue reconstruction (ie. Bankart repair and capsular shift), to regain (passive) stability. However an open procedure may be chosen when a) there is no labral damage and the procedure is primarily a capsular shift b) a Laterjet procedure has been undertaken (bony augmentation of anterior glenoid with a coracoid transfer). In the open procedure, subscapularis tendon will have been divided to gain entry into the joint and it is re-sutured at the end of the procedure. Those with primarily soft tissue repair (Capsular shift) may be kept in the sling for longer to encourage 'stiffness' as they can have a tendency to stretch out too quickly and feel unstable once again. This is in direct contrast to the Laterjet procedure where stability is primarily regained once bony healing has occurred. Clinical consideration should be given to these factors in rehabilitation.

The Gleno-humeral joint is immobilised for 3 weeks in a sling. Patients can only remove their sling to do elbow exercises and axillary hygiene during this time. Unless specified the sling can be worn outside of clothes.

General guidelines for rehabilitation

There will be variation in the ability of patients to regain movement following surgery and immobilisation. Some patients will need help with regaining movement, others need 'holding back' with more emphasis on muscle activity. Be aware of the 'safe zones' (elbow infront of midline etc). see ref:

• If the patient appears to be regaining full range of movement too quickly (i.e. in the first 4-8 weeks) – stop mobility work and concentrate on cuff / scapula and general arm.

Week 0 - 3

Aims	Suggested Treatment
Pain well controlled	Ice packs can be used
 Protect Anterior stabilisation repair 	 Elbow, Neck & Wrist ROM exercises
Wounds healthy	Education on rehabilitation and
Encourage patient compliance	expectations



Aims	Suggested Treatment
Maintain lower limb strength.	 Scapula setting in sitting Teach removal of sling/ brace as well as education on resting positions. Ensure appropriate OPA made for approx. 3/52 time

Restrictions	Key Milestones to Achieve
No passive abduction	Ensure patient aware of how to protect
No external rotation	surgical repair – i.e.the safe zones
	Pain controlled

Week 3-6

Aims	Suggested Treatment
Wean out of the sling	Scar massage (if necessary)
Aim to regain GH joint flexion	Passive & active assisted shoulder
Minimal pain	flexion. Progress to active shoulder
Improve scar mobility	flexion as comfort allows.
 Return to light work / school as pain & 	Scapula stability work – eg. weight
range allows	bearing 4 pt kneeling once range (ie >90)
 Postural awareness 	achieved
	Isometric cuff work in neutral position
	(pain free and scapula stable)
	Maintain lower body strength
	Core stability work incorporating lower
	limbs

Restrictions	Key Milestones to Achieve
 No passive external rotation beyond 20° 	Regaining active range of movement –
No passive or active combined abduction	flexion, extension
& external rotation	Adequate scapula control
	Pain control
	Functional activities at waist height
	Driving

Week 6 - 12

Aims	Suggested Treatment
Minimal Pain	 Continue to work on range as necessary,
Increase ROM	including abduction (be aware of
Increase cuff activation	precautions in introduction)
Postural control	 Progress cuff activity – isometric, to



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Aims	Suggested Treatment
Optimal movement patterning	 isometric at different ranges, moving to isotonic exercises as comfortable Progress scapula muscle activity - Proprioception exercises – eyes open/closed, drop & catch Normal movement patterning as range
	returns • Core stability work

Restrictions	Key Milestones to Achieve
No passive external rotation beyond 20°	All patients weaned from sling
No passive combined abduction &	ROM should be approximately 75% of
external rotation up until week 8 -12 eg.	contralateral side
no wide arm press-ups, passive stretches	External rotation restricted still (50% of
No exercise or activity that increases	contralateral shoulder)
marked pain or causes apprehension	Good muscle control of active range of
	movement

3-6 Months

Aims	Suggested Treatment
 Regain full range of movement, including abduction and external rotation (if able without apprehension) Progressively improve control in previously apprehensive positions Improve power/ endurance of operated shoulder Good dynamic proprioception A fully rehabilitated shoulder for non-contact functional demands 	 Active control > passive stretches in abduction & external rotation as possible Stretches/ Mobilisations if passive range is stiff still (discuss with senior staff if unsure) Progress resistance through range Press ups if good shoulder control Overhead stability work (eg. perturbation training) Introduce Plyometric exercises when range, strength & control allow Sport specific fitness & agility exercises

Restrictions	Key Milestones to Achieve
 External Rot should remain tighter on the operated side approx. 90% ROM of contralateral side Do not encourage passive stretches of abduction and external rotation if any anterior apprehension symptoms/signs 	 Gradual return to <i>non-contact</i> sports Psychologically prepared for return to sport



6-12 Months

Aims	Suggested Treatment
 Symptom-free training Build suitable endurance, strength and reactions for functional/ sporting demands 	 Return to fitness training at specific sport Non-contact sport approx. 6 months Contact sports approx. 9 months
 Sustain high level plyometric training Psychologically prepared for unrestricted, confident function No residual complications Long-term maintenance programme established 	

Restrictions	Key Milestones to Achieve
	Confident function
	 Long-term maintenance programme established
	 90-100% contralateral shoulder AROM
	No apprehension with specific
	movement and activities.

Advice on Return to Activity

- **Driving:** When adequate ROM and safe to control the car. Able to react in the event of an emergency i.e. able to perform an emergency stop. This is usually within a week of coming out of the sling.
- Work: Those in desk_ based roles should be able to return to work in approximately 3-4 weeks with modifications as needed (& allowed by employer). Those in more manual work should be guided by activities described on the protocol and with advice from the hospital or treating physiotherapist.
- **Swimming:** As symptoms allow, modified breaststroke can usually begin at eight, freestyle at twelve weeks depending on how quickly flexibility (and control) is returning. Err on the side of caution with the open/arthroscopic capsular shift patients.
- Within 6 months: Non Contact sports or sports where patients have control of their arm/body and are not likely/can minimise the chances of a fall with the force of body weight (e.g. pilates, yoga, swimming, running, cycling, racket sports, gymnastics, fencing, rock climbing).



These can be started if range, control, endurance and strength are adequate for the activity/sport in question. Consider breaking down activities into components and think about maintaining & optimising stability throughout.

Over 6 months: Contact sports (e.g. hockey, football, rugby, judo, BMX biking)
 As for non-contact sports above but can add increasing force and impact (eg, falling press-ups, pad- training) so training is preparing for unexpected forceful contact and preparing the neuromuscular system to be able to respond.

References

American Society of Shoulder and Elbow Therapists; Arthroscopic Anterior Stabilization with or without Bankhart Repair 2007 – see pdf

Bateman M, Smith BE et al (2015) Physiotherapy treatment for atraumatic recurrent shoulder instability. Shoulder & Elbow 7,4,282-288 for 'Derby Instability Programme' later rehabilitation ideas – can see programme as pdf

Contact Biomet-Merck for copies-useful closed kinetic chain exercises

Gibson J, Kerss J, Morgan C, Brownson P. (2016) <u>Accelerated rehabilitation after arthroscopic</u> <u>Bankart repair in professional footballers</u>. Shoulder & Elbow. Oct;8(4):279-86.

Gibson, J C (2004). 'Rehabilitation after shoulder instability surgery'. Current Orthopaedics, 18, 1979.

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McMullen, J & Uhl, T (2000). 'A kinetic chain approach for shoulder rehabilitation', Journal of Athletic Training, 35, 3, 329-337.

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Shoulderdoc.co.uk website safe zones. https://www.shoulderdoc.co.uk/article/1329