**Treatment Guidelines for Frozen Shoulder/Adhesive Capsulitis**

**TREATMENT AND REHABILITATION PROTOCOL**

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| **STAGE** | **AIMs & OBJECTIVES** | **TREATMENT** | **HOME EXERCISE** | **EXERCISE PRESCRIPTION or CLINICAL PILATES PROGRAM****(see attachments)** | **ACTIVITY MODIFICATION** |
| 1 | **Painful/Freezing Phase (2-9 months)**Ensure patient has excellent understanding of condition and self-management tools-Optimism => self-limiting condition, long duration of time needed | -Education re condition-Pain education/management-Postural advice-Often hands-off approach as too painful-May tolerate some low grade mobilisations – AP/PA, inferior glide, traction etc -Contributing factors/other affected regions: Assess and treat Cx/Tx spine if appropriate (think scapulohumeral rhythm being affected by FS)-X-ray for differential diagnosis of GH jt OA or posterior dislocation -Referral to Forte sports doc for US guided GHjt CSI (YES THEY PERFORM THIS) (2016 systematic review of RCTs showed CSI superior to placebo and physiotherapy in short-term (up to 12 weeks)-Jo Gibson also advocates for this – some evidence that early CSI may prevent development to stage 2  | -Scapular setting -Pendular swing-AA flexion supine (stick or non-affected arm)-AA external rotation supine (stick)-Supine GHjt ER beach stretch-Posterior capsule stretch standing or side lying (sleepers)Pulley | Pacing initially – little amounts often i.e. 10 reps every 2-3 hours as opposed to 3x20 at once Aiming to keep joint moving and prevent further stiffness – keep high rep range (15-20) if patient can tolerate | Avoid overhead movements HEAT – reduce pain, improve ROM (systematic review below)Avoid heavy liftingTake care when dressing – HBB/IR (tucking shirt in) often painful, affected arm in firstAvoid sleeping on affected shoulderPacing – little and often with home exercises and any activity requiring use of shoulder e.g. housework  |
|  | **CRITERIA TO PROGRESS** | **Pain reduction - less night pain, less pain with functional tasks I.e. less pain dressing, tucking shirt in etc** |
| 2 | **Frozen Phase (4-12 months)**Start to work on increasing ROM  | -Education -Manual therapy as above-Soft tissue release of anterior shoulder, pecs, biceps, posterior cuff-AROM-HEP | -Scapular setting -Pendular swing-AA flexion supine (stick or non-affected arm)-AA external rotation supine (stick)-Supine GHjt ER beach stretch-Posterior capsule stretch standing or side lying (sleepers)-Pec stretch in door frame |  | Avoid overhead movements Avoid heavy liftingTake care when dressing – HBB/IR (tucking shirt in) often painful Avoid sleeping on affected shoulderPacing – little and often with home exercises and any activity requiring use of shoulder e.g. housework  |
| **CRITERIA TO PROGRESS** | **Further pain reduction – night, functional, gradual improved ROM**  |
| 3 | **Thawing Phase (1-3 years)**Increase ROMRegain strength  | -Education -Manual therapy as above. Can add MWMs-Soft tissue release of anterior shoulder, pecs, biceps, posterior cuff-AROM-HEP | -Side lying ER weighted -Iso ER/IR/Abd/Ext-bungi ER/IR-Scap wall push up * Active/ assisted with pulley
* Co-contraction work in 4 pt kneeling or wall.

Any other shoulder strength exercises – endless amounts. Keep specific to patient goals.  | Initially 15-20 reps (muscular endurance) => strength 4-6 reps => hypertrophy 8-12 reps 3-4 sets Start concentric then progress to eccentric then plyometrics if tolerated i.e. push up clap, burpee, speed bench press, speed pendlay/bent over row  | Avoid overhead movements Avoid heavy liftingTake care when dressing – HBB/IR (tucking shirt in) often painful Avoid sleeping on affected shoulderPacing – little and often with home exercises and any activity requiring use of shoulder e.g. housework  |

Further evidence:

Jain, T. K., & Sharma, N. K. (2014). The effectiveness of physiotherapeutic interventions in treatment of frozen shoulder/adhesive capsulitis: A systematic review. *Journal of Back and Musculoskeletal Rehabilitation, 27*(3), 247-273. doi:10.3233/BMR-130443

* Exercises + mobilisations highly recommended in stage 2 + 3 frozen shoulder for reducing pain, improving ROM and improving function
* CSI advised in stage 1
* Ultrasound not recommended at all
* Deep heat can be used for decreasing pain and increasing ROM

Fields, B. K. K., Skalski, M. R., Patel, D. B., White, E. A., Tomasian, A., Gross, J. S., & Matcuk, G. R., Jr. (2019). Adhesive capsulitis: Review of imaging findings, pathophysiology, clinical presentation, and treatment options. *Skeletal Radiology, 48*(8), 1171-1184. doi:10.1007/s00256-018-3139-6

Physio tutors: <https://www.youtube.com/watch?v=rqCBa2zqASo>

* Differentiating between true and pseudo frozen shoulder – pseduo FS may present due to significant muscle guarding limiting abduction, external rotation (studies shown that large increase in passive abduction under anaesthesia)
* Coracoid pain test: sensitivity 96%; specificity 87-89% => great test to rule in and rule out true FS
	+ How to perform (palpation):
	1. AC joint
	2. Antero-lateral subacromial area
	3. Coracoid process
* +ve test: POP at coracoid >3/10 on VAS compared to first 2 regions
* Rationale: thickening of a coracohumeral ligament, rotator cuff interval capsule and coracoid triangle (seen on MRI/MR arthrogram)