

SCAPULAR STRENGTHENING PROTOCOL/PROGRESSION

Phase I

The beginning phase of scapular strengthening is designed to initiate firing of the muscles that control the scapula. Depending on the type of scapular dyskinesia or weakness present, select the appropriate exercise to combat the physical exam findings. Please see figures for exercise description.

Isometrics:

Isometric squeezing exercise may begin with many post-operative patients or those that are having significant pain with lifting exercises.

1. Scapular pinches: Squeeze shoulder blades together and hold for 3 seconds
2. Robbery pinches: Squeeze shoulder blades together and hold for 3 seconds in a position described by Kibler (see Swiss Ball Robbery for position)
3. Low Row Wall isometrics: With back against wall, arms to side and extended, push fingertips into wall, holding 3 seconds.

Isotonics:

Advancement to active shoulder/scapular joint movement occurs when painful arc symptoms are diminished. These exercises use light resistance with emphasis on proper technique. 3 sets of 10 up to 3 sets of 20 with 3 second holds.

1. Scapular pinches using theraband: Using tensioned theraband in front of body, spread theraband by pinching shoulder blades together. It is very important to keep elbows tucked to side during entire routine.
2. Low Row Theraband: Standing with arms to side, loop theraband around stable object, and pull both arms into extension behind body squeezing lower scapular muscles.
3. Dynamic Hug: Place single theraband around back grasping band with both hands in front, perform hugging motion to perform protraction of scapula
4. Scapular Punches: Affix theraband to door approximately shoulder height. With back to door grab theraband and mimic punching motion making sure to achieve full protraction.
5. Cheerleader Exercise: Using single piece of theraband held with both hands in front of body, elbows completely extended, pull theraband apart in horizontal action. Return to starting position, then pull theraband in D2 diagonal position, then alternate arm elevation.

Phase II

This phase of scapular strengthening is usually instituted when there is no/minimal pain in shoulder with lifting arm overhead, although some exercises could be used at an earlier time frame if non-painful.

1. Seated Rows: Seated on a bench, using a cable column or row machine, pull handle into sternum while pinching shoulder blades together. Pinch and hold shoulder blades then lengthen arms to a fully protracted position and repeat. It is very important to keep elbows tucked during entire exercise. Can also perform single arm rows.
2. High Rows: same exercise as above, raising cable column to higher position and pull downward into chest.
3. Swiss Ball Robbery: While lying on stomach on Swiss ball, place dumbbells in front of body on floor. Grasp dumbbells and retract scapulas to achieve the “robbery position” while maintaining spine extension. This allows posterior chain strengthening along with lower Trapezius strengthening.
4. Standing D2 cocking cable column: While in standing position, using either theraband or cable column, starting hand in position across body and around shin height, pull upward at a diagonal to achieve “Statue of Liberty” position. Return to start position and repeat
5. Lat pull downs: Keeping bar in front pull lat pull down handle into chest to exercise lower scapular musculature
6. Manual resisted scapular strengthening: manual resistance from therapist in sideling position to attempt to isolate scapular movements.

Phase III

This phase is advanced scapular exercises and may not be necessary for all individuals. It incorporated closed chain activities and more aggressive techniques.

1. Super 6: series of scapular exercises that involve reciprocal movements of both arms. (see pictures for description)
2. Standing cable column punch: Using long bar attached to cable column, perform a punching type maneuver with cable column resistance.
3. Bear Crawl on Swiss Ball: With legs on Swiss Ball and trunk extended, maintaining neutral spine, walk out on hands and perform push-up, then crawl back to start position using hands.
4. Plyoball deceleration: With subject kneeling, throw small (2#) plyoball from behind asking subject to catch and decelerate.
5. Seated Pike lift: Using 2 boxes or dumbbells, ask subject to lift buttocks off table or floor while supporting body weight with hands on boxes or dumbbells. 20 second holds.

Super 6 Scapular Routine



1. Upright Row



2. Dynamic Hug



3. Cocking/Deceleration



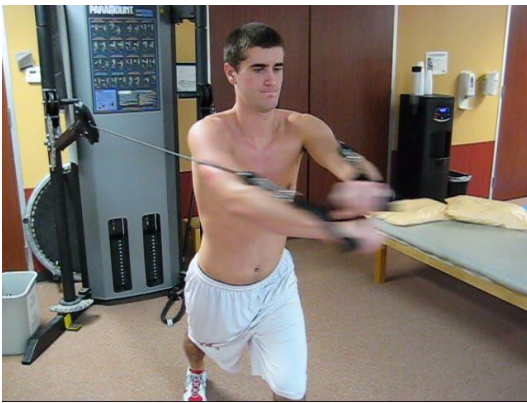
4. Cocking/Acceleration



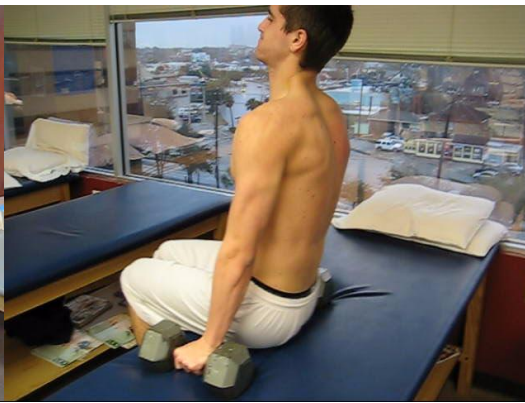
5. Bilateral D2



6. Bilateral Pullover



Dynamic Hug



Seated Pike Lift



Bilateral PNF



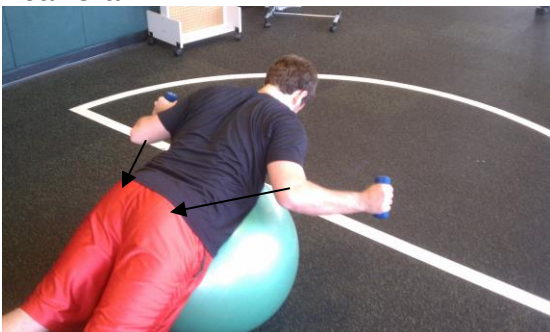
Manual Resisted Protraction/Retraction



Bear Crawl



Cocking Cable Column



Swiss Ball Robbery