

Patient Case

16-year-old male following R shoulder Bankart repair and is currently about 3.5 months post-operation in April. He is a multi-sport athlete in high school and his main goal is to return to playing football. He is a starting defensive back for his high school varsity football team. His team begins organized summer workouts in late June. He is wanting to return to participate in these workouts with no restrictions. Currently, he has full R shoulder AROM, but has not successfully passed the upper extremity return to sport testing battery. He has been mostly positive throughout his rehabilitation as he voices his desire to return when he feels “100 percent.”

Below are some examples of exercises that could be incorporated in his plan of care given restrictions/precautions following surgery. This is not meant to be an all-inclusive list as each individual’s rehabilitation will understandably look different based upon several factors. Even within the listed exercises, there can be a lot of variation with the setup and performance.

For further context, this case is focused on retraining strength. While restoring pain-free ROM is an important part of post-operative rehabilitation, it is not the focus for this specific case.

Abbreviations:

BW = Bodyweight

TB = TheraBand

DB = Dumbbell(s)

KB = Kettlebell(s)

| Phase 1 | |
|---|------------------------|
| Weeks 0-4 Training Emphasis: Protection; Muscle Activation/Re-Education | Rest 30-45 seconds |
| Shoulder AAROM/PROM; Elbow/wrist/hand AROM within appropriate limits | |
| No lifting objects, No supporting BW with hands | |
| Scapular retractions | 3 sets x 20-30 reps |
| Scapular setting | 3 sets x 20-30 reps |
| Shoulder shrugs | 3 sets x 20-30 reps |
| Shoulder isometrics | 2 sets x 30-40 seconds |
| Ball squeezes | 3 sets x 20-30 reps |

| Phase 2 | |
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| Weeks 5-7 Training Emphasis: Work Capacity/Endurance | Rest 30-45 seconds |
| Shoulder AROM/PROM; Elbow/wrist/hand AROM within appropriate limits | |

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| No lifting of objects, No supporting BW with hands, No IR exercises | |
| Shoulder isometrics | 3 sets x 20-30 seconds |
| Serratus punches | 3 sets x 15-20 reps |
| Rows (standing/seated) w/ TB | 3 sets x 15-20 reps |
| Shoulder extensions (standing/seated) w/ TB | 3 sets x 15-20 reps |
| Shoulder ER w/ scapular retraction (arms by side) w/ TB | 3 sets x 15-20 reps |

| Phase 3 | |
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| Weeks 8-11 Training Emphasis: Hypertrophy | Rest 45 seconds-1 minute |
| Goal for progression: Full shoulder AROM | |
| Can use DB, TB, or KB as patient tolerates | |
| Shoulder ER/IR | 3-4 sets x 8-15 reps |
| Rows | 3-4 sets x 8-15 reps |
| Shoulder extensions (standing/seated/prone) | 3-4 sets x 8-15 reps |
| Push-up plus (on knees/knees extended) | 3-4 sets x 8-15 reps |
| Forward punch (standing) | 3-4 sets x 8-15 reps |
| Shoulder lateral raises/scaption | 3-4 sets x 8-15 reps |
| Shoulder forward raises/flexion | 3-4 sets x 8-15 reps |
| Shoulder I's/Y's/T's/W's | 3-4 sets x 8-15 reps |
| Dynamic hugs | 3-4 sets x 8-15 reps |
| Bicep curls | 3-4 sets x 8-15 reps |
| Tricep extensions | 3-4 sets x 8-15 reps |

| Phase 4 | |
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| Weeks 12-17 Training Emphasis: Strength | Rest 2-3 minutes |
| Shoulder IR/ER w/ TB or DB | 3-4 sets x 6-8 reps |
| Rows w/ DB | 3-4 sets x 4-8 reps DAPRE or APRE6 Protocol |
| Lat pull downs/assisted pull ups/pull ups | 3-4 sets x 4-8 reps |
| DB bench press | 3-4 sets x 2-8 reps DAPRE or APRE3/6 Protocol |
| DB shoulder press | 3-4 sets x 2-8 reps DAPRE or APRE 6 Protocol |
| Push-ups (can add weight) | 3-4 sets x 4-8 reps |

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| Shoulder I's/Y's/T's/W's w/ DB | 3-4 sets x 6-8 reps |
| Weighted carries w/ DB or KB | 3-4 sets x 10-20 seconds |

| Phase 5 | |
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| Weeks 18-24 Training Emphasis: Power | Rest 3-5 minutes |
| Plyometric push-ups | 3-4 sets x 2-5 reps |
| MB chest passes/throws | 3-4 sets x 2-5 reps |
| MB overhead passes/throws | 3-4 sets x 2-5 reps |
| Explosive rows (DB/KB/sled) | 3-4 sets x 2-5 reps |
| Plyometric pull ups | 3-4 sets x 2-5 reps |

Using the undulating periodization scheme, here is the layout of what the week may look like given the corresponding “phase” the patient is in.

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| Phase 1: Weeks 0-4 | Training Emphasis |
| Session 1 | Muscle Activation/Re-education |
| Session 2 | Endurance |
| Session 3 | Muscle Activation/Re-education |
| Phase 2: Weeks 5-7 | Training Emphasis |
| Session 1 | Endurance |
| Session 2 | Hypertrophy |
| Session 3 | Endurance |
| Phase 3: Weeks 8-11 | Training Emphasis |
| Session 1 | Hypertrophy |
| Session 2 | Strength |
| Session 3 | Hypertrophy |
| Phase 4: Weeks 12-17 | Training Emphasis |
| Session 1 | Strength |
| Session 2 | Endurance, Hypertrophy, or Power |
| Session 3 | Strength |
| Phase 5: Weeks 18-24 | Training Emphasis |
| Session 1 | Power |
| Session 2 | Strength |
| Session 3 | Power |

Given the weekly layout of sessions detailed above, here is a specific example of what it may look like during “Phase 4” focusing on improving the patient’s strength.

| Week 15 | |
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| Session 1: Strength | |
| DB bench press | APRE6 Protocol |
| Rows | 4 x 6 @ RPE 8 |
| Shoulder IR/ER w/ resistance | 3 x 8 @ RPE 7 |
| Lat pull down | 3 x 8 @ RPE 7 |
| Session 2: Hypertrophy | |
| Shoulder lateral raises | 3 x 12 @ RPE 6 |
| Push up plus | 3 x 15 @ RPE 6 |
| Bicep curls | 3 x 12 @ RPE 6 |
| Session 3: Strength | |
| Unilateral weighted carry | 3 x 15 seconds @ RPE 7 |
| DB shoulder press | 4 x 6 @ RPE 8 |
| Rows | DAPRE Protocol |
| Shoulder I’s/Y’s/T’s | 3 x 8 @ RPE 7 |