A close-up of a logo

Description automatically generated

Criteria to initiate program:

* Proper alignment and eccentric control with bilateral and unilateral closed chain movements.
* Perform Upper Extremity Functional Test at >70% to initiate Phase I.
* MMT 5/5 and pain free in all directions.

Key notes:

* Perform program on every other day basis to allow for 24-48 hours recovery time.
* Perform each level 2-3 sessions before moving on to next level- move to next level once able to complete with proper mechanics, good strength, and without symptoms.
* Athletes will progress at different rates through the program dependent upon confidence, degree of inflammation, severity of injury, age, and type of surgical intervention. Pain and swelling are the best guides to determining tolerance at each phase and whether an athlete should progress to the next step. Progression through the phases is combined evaluation and guidance of rehab provider and coach.
* Setbacks are common during return to sport progressions and sound judgment should be used regarding an extra rest day(s) or regressing back to prior phase if pain and swelling are problematic.
* Continue with strengthening exercises 2-3 times a week while progressing through program- strengthening exercises may overlap days of program and be performed after; however, must have one complete rest day per week.
* Active warm-up to initiate each session with cooldown following. Ice for 10-15 minutes following session as pain and swelling dictate.

Active warm-up

Pre-running drills (15 yards down and back each): jogging, skipping, side shuffle, backpedal, high knees, butt kicks, grapevine

Dynamic stretching (10 yards down and back each): single leg RDL, quad stretch, side lunge, forward lunge, reverse lunge, knee tucks, glute stretch, inchworms, arm swings

Footwork drills: speed ladder or hurdles

Cool down

5-10 minutes global upper extremity, trunk, and lower extremity stretching

Ice for 10-15 minutes as pain and swelling dictates

Phase I:

Rest 30-45 second between hits, 6-8 minutes between sets. Rest 20-30 seconds between serves, 6 minutes between sets.

* Level 1:
  + 20 warm-up hits (40-50% effort)
  + 2 x 15 bump passes (50% effort)
  + 2 x 6 attack hits (50% effort)
  + 2 x 5 sets (50% effort)
  + 2 x 5 serves (50% effort)
  + 10 easy full-court hits
* Level 2:
  + 20 warm-up hits (40-50% effort)
  + 2 x 15 bump passes (50% effort)
  + 2 x 8 attack hits (50% effort)
  + 2 x 5 sets (50% effort)
  + 2 x 5 serves (50% effort)
  + 10 easy full-court hits
* Level 3:
  + 20 warm-up hits (50% effort)
  + 2 x 15 bump passes (50% effort)
  + 3 x 8 attack hits (50% effort)
  + 2 x 8 sets (50% effort)
  + 3 x 5 serves (50% effort)
  + 10 easy full-court hits
* Level 4:
  + 25 warm-up hits (50% effort)
  + 2 x 15 bump passes (60-75% effort)
  + 3 x 8 attack hits (50-60% effort)
  + 2 x 5 sets (50-60% effort)
  + 3 x 5 serves (60-75% effort)
  + 10 easy full-court hits

Phase II:

Rest 30-45 second between hits, 6-8 minutes between sets. Rest 20-30 seconds between serves, 6 minutes between sets.

* Level 1:
  + 25 warm-up hits (60-75% effort)
  + 2 x 15 bump passes (75% effort)
  + 3 x 8 attack hits (60-75% effort)
  + 2 x 5 sets (60-75% effort)
  + 3 x 5 serves (75% effort)
  + 2 x 5 blocks (50% effort)
  + 15 easy full-court hits
* Level 2:
  + 30 warm-up hits (75% effort)
  + 2 x 15 bump passes (75% effort)
  + 4 x 10 attack hits (75% effort)
  + 2 x 8 sets (75% effort)
  + 4 x 5 serves (75% effort)
  + 2 x 5 blocks (50-75% effort)
  + 15 easy full-court hits
* Level 3:
  + 30 warm-up hits (75-90% effort)
  + 2 x 15 bump passes (75-90% effort)
  + 4 x 8 attack hits (75-90% effort)
  + 2 x 8 sets (75% effort)
  + 3 x 5 game placement serves
  + 2 x 5 blocks (75% effort)
  + 15 easy full-court hits

Phase III:

Rest 30-45 second between hits, 6-8 minutes between sets. Rest 20-30 seconds between serves, 6 minutes between sets.

* Participation in team drills at 50-75% effort
* Level 1:
  + 30 warm-up hits (90-100% effort)
  + 2 x 15 bump passes (90% effort)
  + 4 x 8 attack hits (90-100% effort)
  + 2 x 8 sets (80-90% effort)
  + 4 x 4 game placement serves
  + 2 x 5 blocks (75% effort)
  + 2 x 3 digs (50-75% effort)
  + 20 easy full-court hits
* Level 2:
  + 30 warm-up hits (100% effort)
  + 2 x 15 bump passes (90-100% effort)
  + 4 x 10 attack hits (90-100% effort)
  + 2 x 8 sets (90-100% effort)
  + 4 x 5 game placement serves
  + 2 x 5 blocks (90-100% effort)
  + 2 x 3 digs (75-90% effort)
  + 20 easy full-court hits
* Level 3:
  + 30 warm-up hits (100% effort)
  + 2 x 15 bump passes (100% effort)
  + 4 x 12 attack hits (100% effort)
  + 2 x 8 sets (100% effort)
  + 4 x 5 game placement serves
  + 2 x 5 blocks (100% effort)
  + 2 x 3 digs (100% effort)
  + 20 easy full-court hits

Phase IV:

* Full participation in team drills
* Scrimmages at 75% effort
* Participation in team conditioning at full intensity

Phase V:

* Full intensity in training sessions in all scenarios (including scrimmages) with limited playing time initially progressed to unlimited playing time to prepare for game play
* Participation in team conditioning at full intensity