



Flying Fijians

Calf protocol

- *Use test of movements in the next upcoming phase as exit criteria*
- *Check gastroc length and KTW of unaffected leg for baseline measure of mobility & possible causative factors*

Pre-protocol: acute phase

- Protection (ice, PWB, crutches, meds, heel raises)
- Ice 15-20 mins, applied twice every 2 hours
- Use heel raises & high sole shoes
- Avoid stretching of the calf during the first 72 hours (3 days) post-injury

- Stationary bike
- Low resistance
- Used for gentle mobility of soft tissue & conditioning
- 10-15 mins maximum
- Discuss with S&C if intervals needed for conditioning purposes

- Strength training around injury
- after first 72 hours (rest), need to maintain conditioning around the injury
- no pain at all a MUST during these
- leaning back into wall single-leg squat (back foot on wall)
- single-leg deadlift/RDL
- big step walking lunges (all weight on front leg)
- bridging progressions

Phase 1:

- Ankle mobility
- Manual therapy (glides talocrural/subtalar/midfoot)
- Gentle stretching as guided by medical team

- Proprioception
- Box step-up to knee drive (foot stays flat)
- Add perturbations (aquabag on back)

- Early loading
- Wall hurdle calf raises (up & over hurdle)
- Single-leg bridge with toe on ball/ledge
- Feet on medicine balls (alternating calf raises)
- control amount of stretch

Phase 2:

Can commence stretching as needed after 7 days post-injury

Entry test: metronome calf raise (@ 60bpm) = within 90% of unaffected leg, pain-free

- Energy transport knee to ankle
- Step up to knee drive (and toe-off position)
 - can step up into toe-off and land on wall
- Single-leg hinge to bounce up onto box

- Ankle bounces/pulses
- Same as for phase 1 but with fast bounces
- 10 short, fast bounces = x1 repetition
- Double leg > single-leg

- Heavy loaded forefoot strength
- Split squat/lunge with barbell (front leg forefoot on plate)

- Preflex training
- Hands at wall foot switches – build speed
 - medicine ball between hands and wall
- Hop down and hold off plate (aquabag/plate overhead)
- Split switch forefoot jumps (aquabag at chest option)
 - stay in low position, no countermovement allowed

- Jumps (energy transport)

Phase 1:

- Double leg box jumps (hands behind head, plate held in front, plate behind head)
- Double leg hang cleans

Phase 2:

- Double leg box jumps for distance
- Single-leg step jumps (box under one foot vertical jump)

Phase 3:

- Single-leg cleans to box
- Stair jumps (patters, single-leg stair taps, jump ups, jump ups (2 up 1 down))

Phase 4:

- Single step runs
- Double step runs
- Run up and pause (every fourth step)
- Pre-fatigue before runs (lunge jumps, squat jumps then run)

Phase 3: Transverse plane control

- Heavy sled walks (drag or push) – do before runs
- Empty sled runs
- Lateral hop/lateral bound & hold

Phase 4: Impacts for elastic works

Entry test: single-leg hop for distance, within 90% of unaffected leg, pain-free

- Low impact, low speed bouncing
- Skipping (jump rope)
 - double-leg > single-leg > speed
- Low cadence high knees

- High impact bouncing
- Box step off bounce and knee drive
- Hurdle hops (double leg, single-leg, varying heights)
- High cadence high knee drills (1-2-3-3's, 1-2-2's)
- Hop to ground to box (add plate/aquabag)
- Hurdle steps with ankle bounces

Phase 5: Running progression

RTP test: Zig-zag hop, ball pick-up & sprint, pain-free

RTP test: agility T-test (symmetry within 90% of unaffected leg turning direction)

- Accel/decel (off axis starts)
- Top speed
 - build in speed & volume
 - 60% x 30m x 5
 - 70% x 40m x 5
 - gradual build to 100%
 - use running over soft-mats, wickets
- Sidesteps

Generic calf prevention

- Split switch forefoot jumps (leaning/upright)
- Medicine ball calf raise & stretch
- Box tap rolls
- Repeat forefoot jumps (stairs or flat)
- Leaning eccentric eversion?
- Box step off bounces (into hip lock – rear or lateral versions)