## **Bilateral forefoot reconstruction rehabilitation protocol**

## **Phase I – maximum protection (weeks 0 to 6):**

### 0 to 3 weeks:

* Elevate in bed with at least 2 pillows under each leg
* Non-weight bearing for 3-6 weeks per physician’s instructions
* Pain relief, aspirin and Vitamin C for 6 weeks
* CAM boots on for transfers – can be taken off for bed.
* Transfer to wheelchair using CAM boot and resting on heels

### Weeks 3 to 6: review with surgeon then

* CAM boots for all ambulation
* May be allowed to start weight bearing on heels in the CAM boots and use a walker
* Continue to use a wheelchair for longer trips – outdoors etc
* Mobilise feet and ankles – passive and assisted and start Achilles stretches

You can do daily ankle motion exercises to

prevent stiffness: moving the ankle up and down

and making circles.

**Phase II – start up walking (Week 6 to12): review with surgeon, have an xray, then**

* Continue to use CAM boots for ambulation
* Wean off the walker gradually aiming to be fully independent walking at week 12. Continue to put more weight through the front of the feet (simulating normal walking), while wearing the post-operative shoe
* Start seeing a physiotherapist

**Phase III – getting back to normal (3 to 6 months): review with surgeon, have another xray, then**

* wearing a regular sports shoe – start with short walks and gradually increase. Ensure a wide sole, wide body shoe.
* May need to consult an orthotist for customised inserts
* Gradually increase activity. Expect some pain and stiffness that will decrease over time and increases with activity. Most of the recovery will be in the first six months after surgery.

## **Phase II – progressive range of motion and early strengthening (weeks 6 to 12):**

### Weeks 6 to 8:

* Full weight bearing
* Open brace to 45°- 60° of flexion week 6, 90° at week 7
* Continue with swelling control and patellar mobility
* Gradually progress to full range of motion
* Begin multi-plane straight leg raising and closed kinetic chain strengthening program focusing on quality vmo function.
* Initiate open kinetic chain progressing to closed kinetic chain multi-plane hip strengthening
* Normalize gait pattern
* Begin stationary bike
* Initiate pool program

### Weeks 8 to 10:

* Wean out of brace
* Continue with patellar mobility drills
* Normalize gait pattern
* Restore full rom
* Progress open and closed kinetic chain program from bilateral to unilateral
* Increase intensity on stationary bike
* Begin treadmill walking program

## **Weeks 10 to 12:**

* Full rom
* Aggressive terminal quadriceps stretching
* Advance unilateral open and closed kinetic chain strengthening
* Initiate proprioception drills
* May introduce elliptical trainer

## **Phase III – progressive strengthening (weeks 12 to 16):**

### Weeks 12 to 16:

* Advance open and closed kinetic chain strengthening
* Increase intensity on bike, treadmill, and elliptical trainer
* Increase difficulty and intensity on proprioception drills
* Begin gym strengthening: leg press, hamstring curls, ab/adduction; avoid lunges and knee extensions
* Begin multi-directional functional cord program
* Initiate pool running program

## **Phase IV – advanced strengthening and functional drills (weeks 16 to 20):**

### Weeks 16 to 20:

* Continue pool running program advancing to land as tolerated

## **Phase V – plyometric drills and return to sport phase (weeks 20 to 24):**

### Weeks 20 to 24:

* Advance gym strengthening
* Progress running/sprinting program
* Begin multi-directional field/court drills
* Begin bilateral progressing to unilateral plyometric drills
* Follow-up appointment with physician
* Sports test for return to competition **6 months post-op** per physician’s release