

LISFRANC (MID-FOOT) INJURY

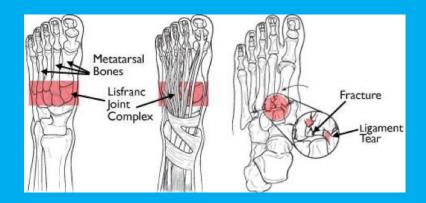
REHABILITATION PROTOCOL

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Sports Medicine & Physiotherapy

LISFRANC (MID-FOOT) INJURY

Lisfranc (midfoot) injuries result if bones in the midfoot are broken or ligaments that support the midfoot are torn. The severity of the injury can vary from simple to complex, involving many joints and bones in the midfoot.

A Lisfranc injury is often mistaken for a simple sprain, especially if the injury is a result of a straightforward twist and fall. However, injury to the Lisfranc joint is not a simple sprain that should be simply "walked off." It is a severe injury that may take many months to heal and may require surgery to treat.



Causes

- Twist and fall
- Player landing on foot
- · Fall from height

NONSURGICAL TREATMENT

If there are no fractures or dislocations in the joint and the ligaments are not completely torn, nonsurgical treatment may be all that is necessary for healing. A nonsurgical treatment plan includes wearing a non-weightbearing cast or boot for 6 weeks. You must be very strict about not putting weight on your injured foot during this period. This then progresses to a graded strength and rehabilitation program.

SURGICAL TREATMENT

Surgery is recommended for all injuries with a fracture in the joints of the midfoot or with abnormal positioning (subluxation) of the joints. The goal of surgical treatment is to realign the joints and return the broken (fractured) bone fragments to a normal position.





PHASE 1 — ACUTE POST-OPERATIVE (FIRST 8 WEEKS)

GOALS **PRECAUTIONS** RECOMMENDED CRITERIA TO **PROGRAM** PROGRESS TO **NEXT PHASE** CTICK WHEN **COMPLETE**) **Protect surgery** Non-1. Pilates reformer ☐ Surgeon weightbearing in satisfied with site program: Maintain core. boot for 4 weeks progress Maintain mobility Weight-bear as upper body of surrounding tolerated in boot and other leg joints strength and from week 4-8 Control pain (begin to wean control 2. Ice therapy boot week 6) Preserve thoracic Return to weightfor pain relief function whilst bearing should and swelling using crutches (GameReady in be progressive clinic) 3. Stretching program for surrounding joints (see videos) 4. Massage and manual therapy from physio to reduce muscular tightness and maintain mobility

Please note that the below timeframes are a guide. Your surgeon or physio may request slight variations for optimum outcome.



PHASE 2 — STRENGTH PHASE (8-12 WEEKS)

PRECAUTIONS GOALS RECOMMENDED CRITERIA TO **PROGRAM** PROGRESS TO **NEXT PHASE** CTICK WHEN **COMPLETE**) Range of Out of boot by 1. Strength program ☐ Normal gait (no 8 weeks and on Pilates reformer limp) motion into jogger and home-based (see Early Single leg calf with over the video's) strengthening raises counter arch 2. Stretching and □ >75% range of Movement support mobility program: motion (knee to mechanics See video's wall test) Pain and 3. Walking and swelling ☐ Target areas movement retraining resolved of weakness, Individualised technique program designed by error and your physio poor mobility 4. Fitness: swimming, improving as boxing, upper-body determined weight training, skiby your ergometer physiotherapist **5. Ice** therapy for pain relief and swelling (GameReady in clinic)

PHASE 3 — POWER PHASE (3 MONTHS — 6 MONTHS)

GOALS

- Return to sport/activity
- Restore full strength/ power
- Resolve all pain
- Improve whole-body strength
- Improve fitness
- Prevent recurrence
- Removal of temporary orthotic

PRECAUTIONS

Hardware removed any time after 4 months but no longer than 6 months

Avoid any activities that cause pain levels greater than 2/10 (on a scale of 0=no-pain to 10=max-pain).

Important note: Keep arch support for exercise and long-distance walking for first 12 months

RECOMMENDED PROGRAM

- 1. Continue individualised strength and stretching program
- 2. Cardio fitness:
 cycling, swimming,
 boxing, cross-trainer
 (running when
 allowed).

Once hardware removed:

3. Plyometric exercises: (See videos)

Progress through levels:

- L1: double leg (jumping)
- L2: single leg (hopping)
- L3: increase speed
- L4: increase duration
- 4. 4. Running rehabilitation as guided by your physiotherapist
- 5. Sports specific skill retraining

CRITERIA TO PROGRESS TO NEXT PHASE (TICK WHEN COMPLETE)

- ☐ Surgeon clearance
- ☐ Strength and power>95% of non-injured leg
- ☐ No pain with daily activities, sports, during/after rehab exercises

Full range of motion (knee to wall test) Pre-injury fitness/ load restored (or enhanced)

Biomechanical errors resolved

PHASE 1

REFORMER

- Single leg supine
- Seated arm work (or kneeling)
- Core: arms in straps, planking

HEP

- · Clams, theraband arms
- 4-pt kneeling
- Spine core work
- Mobility on roller/ball

PHASE 2

REFORMER

- Double leg supine
- Skater
- Scooter
- Squats
- Seated arm work (or kneeling)
- · Core: arms in straps, planking

HEP

- Squats
- Bridges
- Crab walks
- Balance
- Foot intrinsics
- Lunges
- Step ups
- Clams, theraband arms
- 4-pt kneeling
- Spine core work
- Mobility on roller/ball



PHASE 3

REFORMER

- Jumps
- Hops
- TRX jumps
- Bosu jumps
- Squats
- Kneeling arm work (or kneeling)
- · Core: arms in straps, planking

HEP

- Squats
- Bridges
- Crab walks
- Balance
- Foot intrinsics
- Lunges
- Clams, theraband arms
- 4-pt kneeling
- Spine core work
- Mobility on roller/ball