Connecticut Orthopaedics

**Megan R. Wolf, MD**
**Sports Medicine/Foot & Ankle**

**Lisfranc Open Reduction Internal Fixation**
Post-Operative Protocol

**Phase I - Maximum Protection**
**Weeks 0-2**

- Post-operative splint
- Non-weight bearing at all times with use of crutches
  - No scooter

  Goals
  - Reduce inflammation and pain
  - Protect surgical repair
  - Maintain strength and range of motion of non-operative joints

  Exercise progression
  - Open chain hip strengthening
  - Gait training
  - Elevation and ice to assist with swelling reduction

**Weeks 2 to 6:**

- Transition to CAM boot
- Non-weight bearing with use of crutches or scooter pending MD approval

  Goals
  - Reduce inflammation and pain
  - Protect surgical repair
  - Maintain strength in contralateral limb and unaffected joints

  Exercise progression
  - Elevation and ice to assist with swelling reduction

**Phase II- Early Stretching and Strengthening**
**Weeks 6 to 12:**

- Gradual progression of weight bearing while in CAM boot
- Initiate range of motion at foot and ankle
- Initiate closed chain strengthening consistent with weight bearing status

  Goals
  - Reduce inflammation and pain
  - Protect surgical repair
  - Weight bearing progression while in CAM boot
    - Week 6: 25% weight bearing
    - Week 7: 50% weight bearing
    - Week 8: weight bearing as tolerated progressing to full weight bearing
  - Initiate strengthening at foot and ankle

  Exercise progression
  - Normalize gait pattern
  - Introduce bike or NuStep
  - Bilateral and unilateral closed kinetic chain strengthening program consistent with weight bearing status
  - Isometric ankle/foot strengthening once full weight bearing
  - Intrinsic foot strengthening
  - Modalities for pain relief and swelling reduction

Connecticut Orthopaedics

**Megan R. Wolf, MD**
**Sports Medicine/Foot & Ankle**



**Phase III- Progressive Stretching and Strengthening**

**Weeks 12 to 18:**

- Discontinue CAM boot and transition to shoe with full length carbon fiber insert
- Weight bearing as tolerated
- Progress closed chain strengthening
- Initiate balance/proprioceptive drills

  Goals
  - No swelling
  - Weight bearing progression
    - Weeks 12 and 13: transition out of CAM boot for household ambulation and PT only
    - Week 14: transition out of CAM boot at all times
  - Full range of motion
  - Normal gait pattern
  - Progress single limb strength

  Exercise progression
  - Gait training- normalize gait pattern
  - Proprioception/balance drills
  - Unilateral closed kinetic chain strengthening program
  - Bike and elliptical trainer

**Phase IV- Advanced Strengthening and Running Progression**

**Weeks 18-22:**

- Shoe with full length carbon fiber insert
- Administer Preliminary functional test at 18 weeks for physical therapist to review
- Initiate straight line jogging at 18 weeks if proper biomechanics are demonstrated and symmetry on functional test
- Advance strengthening program
- Initiate plyometrics progressing from double limb to single limb
- Potential removal of hardware by MD at 20 weeks if dictated by swelling/pain
- Administer Return To Sport functional test at 24-26 weeks prior to MD appointment for physician to review

  Goals
  - No swelling
  - Full range of motion
  - Symmetrical strength and power

  Exercise progression
  - Basic ladder series
  - Linear jogging progression
  - Basic plyometric box progression
  - Gym strengthening progression

Criteria to be released for return to sport
- Follow-up examination with the physician
- Pass Return To Sport functional test at >90% (involved vs. uninvolved limb)
- Display symmetry and confidence in high-speed cutting, multi-plane plyometric drills, sprinting and decelerating

Anticipated return to sport:
- 26 weeks for contact and non-contact athletes