CHEVRON OSTEOTOMY POSTOPERATIVE PROTOCOL

Distal Metatarsal Osteotomy – 12-Month Rehabilitation Plan

Procedure Overview

A Chevron osteotomy is a distal metatarsal osteotomy used to correct hallux valgus. The procedure repositions the first metatarsal head and stabilizes it with internal fixation. Rehabilitation focuses on protecting the osteotomy, restoring 1st MTP motion, normalizing gait, and gradually returning to full activity.

PHASE 0: Immediate Postoperative (0–2 Weeks)

Goals

- Protect osteotomy
- Control swelling
- Maintain alignment
- Prevent wound complications

Weight Bearing

- **Heel-weight bearing only** in postoperative shoe
- Elevation above heart level as much as possible

Immobilization

- Postoperative shoe or splint worn at all times
- Do not remove dressings

Therapeutic Interventions

- Ankle pumps
- Knee/hip ROM
- Deep breathing for circulation
- No forefoot pressure

Precautions

- Keep incision dry
- Avoid dependent positioning

PHASE 1: Early Healing (2–6 Weeks)

Goals

- Maintain correction
- Begin gentle 1st MTP motion
- Reduce swelling
- Protect osteotomy

Weight Bearing

- **Progress to partial weight bearing** in postoperative shoe
- Avoid forefoot push-off

Therapeutic Interventions

- Gentle 1st MTP ROM (flexion/extension only)
- Scar mobilization once incision healed
- Ankle ROM
- Light intrinsic activation (towel scrunches, toe spreading)
- Stationary bike with stiff-soled shoe

Precautions

- No aggressive MTP mobilization
- No barefoot walking

PHASE 2: Transition Phase (6–10 Weeks)

Goals

- Normalize gait in boot
- Improve 1st MTP mobility
- Begin strengthening

Weight Bearing

- **Full weight bearing in boot**
- Wean from assistive devices

Therapeutic Interventions

- Foot intrinsic strengthening
- Ankle strengthening with bands
- Balance training (double-leg → single-leg)
- Pool walking
- Stationary bike, elliptical (no incline)

Criteria to Progress

- Pain ≤ 3/10 with walking
- Incision fully healed
- Radiographic evidence of osteotomy healing (per surgeon)

PHASE 3: Early Functional Phase (10–14 Weeks)

Goals

- Transition to supportive shoe
- Normalize gait
- Improve proprioception and strength

Weight Bearing

- **Full weight bearing in supportive sneaker**
- Wide toe box recommended

Therapeutic Interventions

- Closed-chain strengthening (mini-squats, step-ups)
- Gait retraining
- Balance and proprioception
- Elliptical, cycling, swimming

PHASE 4: Advanced Strengthening (14–20 Weeks)

Goals

- Restore full foot/ankle strength
- Improve dynamic balance
- Prepare for impact activities

Therapeutic Interventions

- Single-leg strengthening
- Lateral movements
- Functional movement patterns
- Low-impact plyometrics
- Sport-specific drills (non-impact)

Criteria to Progress

- Pain-free walking
- Good single-leg control
- Functional 1st MTP ROM

PHASE 5: Return-to-Impact (20–24+ Weeks)

Goals

- Gradual return to running and impact
- Restore full functional mobility

Therapeutic Interventions

- Walk-jog progression
- Plyometrics
- Agility drills
- Higher-level balance

Notes

- Impact typically begins **16–20+ weeks** depending on healing
- Chevron osteotomies tolerate impact earlier than proximal osteotomies

PHASE 6: Long-Term Recovery (6–12 Months)

Goals

- Full return to sport
- Maximize strength and endurance
- Achieve final cosmetic and functional result

Expectations

- Residual swelling may persist **6–12 months**
- Final surgical result often not fully realized until **1 year**

Therapeutic Interventions

- Continued strengthening
- Sport-specific training
- Toe mobility maintenance
- Footwear optimization

YEAR-LONG MILESTONES SUMMARY

Timeframe	**Milestones**
0-2 weeks	**Heel WB, welling control, protect osteotomy**
2-6 weeks	**Partial WB, gentle 1st MTP ROM**
6-10 weeks	**Full WB in boot, strengthening begins**
10-14 weeks	**Transition to sneaker, normalized gait**
14-20 weeks	**Advanced strengthening, low-impact sports**
20-24+ weeks	**Jogging progression, impact activities**
6-12 months	**Full Recovery, final swelling resolution**

RED FLAGS (Notify Surgeon)

- Increasing pain unresponsive to rest
- Signs of infection (redness, drainage, fever)
- Loss of toe alignment
- Calf pain or swelling