Lateral malleolus fracture with distal tibiofibular syndesmotic injury

Fibular fixation with stabilisation of an unstable syndesmosis using a screw or suture-button construct. Both bone healing and distal tibiofibular stability require protection.

Prepared by Tomasz Poboży — orthopaedic surgeon · Published 19 October 2026

For clinicians, physiotherapists and patients. The individual plan based on the operative report takes precedence over the time ranges on this page.

Essential protection

Weight-bearing	Obtain a written loading plan after syndesmotic fixation. Initial non-weight-bearing or restricted loading is commonly used; earlier walking requires explicit surgeon clearance for the actual construct.
Brace / immobilisation	Splint/cast or walking boot according to stability and wound condition.
Range of motion	Active movement after clearance; movement permission does not imply permission for resistance or full loading.

Rehabilitation at a glance

Timings are approximate. Progression requires criteria and clearance for the relevant motion or loading level.

01

Protection and independence

Weeks 0–2

Safe transfers, swelling control and protection of the wound and fixation.

02

Movement with protection

Weeks 2–6

Restore gentle movement without jeopardising repaired tissues.

03

Walking and strength recovery

Usually weeks 6–12

Gradual return to footwear and walking without a limp.

04

Function and return to activity

From around week 12; criteria based

Restore limb control, stair function, endurance and task-specific capacity.

Full rehabilitation board

POBOZY.ORG / POSTOPERATIVE REHABILITATION

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Fibular fixation with stabilisation of an unstable syndesmosis using a screw or suture-button construct. Both bone healing and distal tibiofibular stability require protection.

01 Protection and independence

Weeks 0–2

Tomasz Pobozy

Non-weight-bearing mobility with two crutches

After supervised instruction, place both crutches ahead. Support yourself through the hands and unaffected leg; keep the operated foot off the floor. Avoid long hops. Use a walker or wheelchair if balance is inadequate.

Dose / practice: Essential short transfers with rest; no unsupervised stair practice.

Watch for: Stop for loss of balance or new pain after accidental loading and contact the treating team.

02 Movement with protection

Weeks 2–6

Tomasz Pobozy

Gentle active ankle movement

Sit with the lower leg supported and the foot free to move. Once removal of the boot is permitted, gently move the foot towards and away from you. Use active movement, without pulling with a towel or having another person force the joint.

Dose / practice: Starting dose to individualise: 5–10 slow repetitions, 3–5 short sessions daily, within the permitted range.

Watch for: Reduce range and dose for sharp pain, wound tension or increased swelling after the session.

03 Walking and strength recovery

Usually weeks 6–12

Tomasz Pobozy

Light resisted plantarflexion

Sit with the heel supported, place a lightly tensioned band around the forefoot and hold the ends. Slowly point the foot away while keeping the lower leg still. Do not turn or twist the foot.

Dose / practice: After resistance is permitted: 1 set of 8–12 repetitions on alternate days. Band colour is not a universal resistance measure; the physiotherapist selects it.

Watch for: Stop and reassess for pain above the ankle or at the fixation site.

04 Function and return to activity

From around week 12; criteria based

Tomasz Pobozy

Supported double-leg heel raise

After forefoot loading is permitted, stand in supportive shoes and hold a counter. Raise both heels a small distance and lower them slowly. Avoid rolling onto the outer borders of the feet or bouncing.

Dose / practice: For example, 1 set of 6–10 repetitions on alternate days, progressing to 2 sets after checking tolerance. No added weight initially.

Watch for: Fracture-site pain or increased swelling the following day indicates excessive loading.

Before starting

Obtain a written loading plan after syndesmotic fixation. Initial non-weight-bearing or restricted loading is commonly used; earlier walking requires explicit surgeon clearance for the actual construct.

Splint/cast or walking boot according to stability and wound condition. Active movement after clearance; movement permission does not imply permission for resistance or full loading.

Permission to move ≠ permission for resistance and full loading. Illustrations show selected activities; consult the full protocol for restrictions, criteria and warning signs. Doses are examples to individualise.

Prepared by Tomasz Poboży — orthopaedic surgeon

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Illustrations created for this protocol. A later-phase exercise is not permitted merely because it appears on the board.

Exercises — take a closer look

4 phases • technique • dosage • when to stop

Each phase has its own illustration. The descriptions below are the text equivalent of the board. Doses are starting examples to individualise with a physiotherapist and do not override surgical restrictions.

Phase 1 · Weeks 0–2

Non-weight-bearing mobility with two crutches

After supervised instruction, place both crutches ahead. Support yourself through the hands and unaffected leg; keep the operated foot off the floor. Avoid long hops. Use a walker or wheelchair if balance is inadequate.

Dose to individualise

Essential short transfers with rest; no unsupervised stair practice.

When to reduce or stop

Stop for loss of balance or new pain after accidental loading and contact the treating team.

Check this phase's restrictions and criteria →

Phase 2 · Weeks 2–6

Gentle active ankle movement

Sit with the lower leg supported and the foot free to move. Once removal of the boot is permitted, gently move the foot towards and away from you. Use active movement, without pulling with a towel or having another person force the joint.

Dose to individualise

Starting dose to individualise: 5–10 slow repetitions, 3–5 short sessions daily, within the permitted range.

When to reduce or stop

Reduce range and dose for sharp pain, wound tension or increased swelling after the session.

Check this phase's restrictions and criteria →

Exercises - continued

Phase 3 · Usually weeks 6–12

Light resisted plantarflexion

Sit with the heel supported, place a lightly tensioned band around the forefoot and hold the ends. Slowly point the foot away while keeping the lower leg still. Do not turn or twist the foot.

Dose to individualise

After resistance is permitted: 1 set of 8–12 repetitions on alternate days. Band colour is not a universal resistance measure; the physiotherapist selects it.

When to reduce or stop

Stop and reassess for pain above the ankle or at the fixation site.

Check this phase's restrictions and criteria →

Phase 4 · From around week 12; criteria based

Supported double-leg heel raise

After forefoot loading is permitted, stand in supportive shoes and hold a counter. Raise both heels a small distance and lower them slowly. Avoid rolling onto the outer borders of the feet or bouncing.

Dose to individualise

For example, 1 set of 6–10 repetitions on alternate days, progressing to 2 sets after checking tolerance. No added weight initially.

When to reduce or stop

Fracture-site pain or increased swelling the following day indicates excessive loading.

Check this phase's restrictions and criteria →

Who this protocol is for

Fibular fixation with stabilisation of an unstable syndesmosis using a screw or suture-button construct. Both bone healing and distal tibiofibular stability require protection.

Adults after fixation of a closed fracture. Open fractures, infection, neuropathy, vascular compromise, pilon injuries, cartilage repair and multiple injuries require a separate plan.

Before starting, confirm the operation date and extent, fixation, permitted loading, support-removal rules, range of motion and review date. Obtain any missing instruction from the surgeon before progressing.

Full programme by phase

01 · Protection and independence

Weeks 0–2

Goal	Safe transfers, swelling control and protection of the wound and fixation.
Weight-bearing	Follow the prescribed loading level exactly. If it is undocumented, contact the surgeon before increasing load; do not independently adopt weight-bearing as tolerated.
Support / immobilisation	Splint, cast or walking boot as discharged. Remove only when permitted.
Motion	Move the knee, hip and unrestricted toes. Move the ankle only after clearance to mobilise and remove the support; do not force it.
Work in this phase	Practise safe sit-to-stand transfers and short-distance mobility. Maintain thigh activation without resistance through the foot. Follow the individual thromboprophylaxis prescription.
Progression criteria	Wound and circulation assessed, swelling controlled, loading prescription understood and aids used safely.

See the exercise or activity for this phase →

02 · Movement with protection

Weeks 2–6

Goal	Restore gentle movement without jeopardising repaired tissues.
Weight-bearing	Obtain a written loading plan after syndesmotic fixation. Initial non-weight-bearing or restricted loading is commonly used; earlier walking requires explicit surgeon clearance for the actual construct.
Support / immobilisation	Usually a removable walking boot when the wound and stability permit. Night-time use follows the surgeon’s instructions; do not discontinue it independently.
Motion	Active dorsiflexion and plantarflexion within the permitted range. Avoid forced external rotation, end-range dorsiflexion and syndesmotic manipulation.
Work in this phase	Use short movement sessions several times daily. Continue hip and knee strengthening without foot loading. Practise gait within the prescribed load and avoid pivoting on the operated leg.
Progression criteria	Clinical and imaging review confirms maintained alignment, without worsening wound or increasing pain. Further resistance and loading progression have been authorised.

See the exercise or activity for this phase →

Full programme - continued

03 · Walking and strength recovery

Usually weeks 6–12

Goal	Gradual return to footwear and walking without a limp.
Weight-bearing	Progress only after clearance based on healing and stability. Move from two crutches to one, usually contralateral, then no aid, provided gait quality is maintained.
Support / immobilisation	Wean from the walking boot in stages once cleared. Choose supportive footwear; swelling may require a wider shoe.
Motion	Gradually expand active movement and, after healing assessment, gentle assistance. Do not force symmetrical angles at the expense of pain.
Work in this phase	Add light resistance and weight-bearing exercises within the loading limit. Start stationary cycling only when pedal loading and required motion are permitted. Increase one variable at a time.
Progression criteria	Walking in shoes without a significant limp, no marked next-day reaction, improving motion and strength, and healing adequate for further progression.

See the exercise or activity for this phase →

04 · Function and return to activity

From around week 12; criteria based

Goal	Restore limb control, stair function, endurance and task-specific capacity.
Weight-bearing	Full weight-bearing after clearance. Running, jumping and direction changes require confirmed healing, adequate strength and control, and no pain or swelling response.
Support / immobilisation	Usually supportive footwear. Additional bracing requires a specific indication and does not replace neuromuscular recovery.
Motion	Range sufficient for gait and functional tasks; persistent mechanical block, joint pain or increasing stiffness requires reassessment.
Work in this phase	Progress calf strengthening, balance and functional tasks. Before sport, assess both limbs, movement quality and endurance; symmetry alone is insufficient if both limbs are weak.
Progression criteria	Treating-team clearance, no fracture-site pain, safe stairs and work- or sport-specific tasks, without deterioration after loading or the following day.

See the exercise or activity for this phase →

How to adjust the dose

Increase one element at a time: repetitions, distance, range or resistance. Sharp pain, limping or markedly increased swelling calls for reducing the load. Check symptoms after exercise and the following day; discuss persistent deterioration. Absence of pain does not replace union assessment.

If the surgeon prescribes a kilogram limit, record the value and duration. Do not independently convert “as tolerated” into kilograms. Do not add weights without clearance for resistance.

Everyday activities and return to function

Walking and stairs

Use aids while needed to respect the load restriction and maintain gait quality. Practise stairs with a physiotherapist; choose a safer alternative when support or a rail is unavailable.

Driving

Resume only after assessment of rapid, forceful emergency braking and without medication impairing alertness. Operated side, transmission, bracing and loading restrictions affect the decision; discuss it with the treating team and consider insurance conditions.

Work, rest and swelling

Seated work requires opportunities to change position and elevate the leg; standing or manual work requires loading and task tolerance. Swelling may persist, but new or rapidly increasing swelling requires assessment.

Wound care and prevention

Do not soak an unhealed wound, remove wires yourself or change prescribed thromboprophylaxis. Follow individual medication, dressing, compression and scar-care instructions. Swimming requires complete wound closure and clearance.

Running and sport

Timing follows healing and capacity; it is not a stand-alone criterion. Establish safe gait, strength, balance and task tolerance first, progressing without significant next-day worsening.

Warning signs — when to seek help

Emergency help

Sudden shortness of breath, chest pain, collapse or coughing up blood: call emergency services. Use 112 in the EU; elsewhere use the appropriate local emergency number.

Urgent same-day assessment

New one-sided calf pain and swelling; increasing pain despite rest; fever with wound redness or discharge; wound breakdown; a new injury or pain after accidental loading.

Do not wait for a routine appointment

A cold, pale or blue foot, rapidly increasing numbness, loss of toe movement or severe increasing pain under a cast requires immediate emergency assessment.

Variants and clinical context

- Implant type alone does not authorise early full weight-bearing. Deltoid repair, a Maisonneuve injury or a posterior malleolus fracture may alter the plan.
- The treating surgeon must establish fixation stability. No implant protects against every overload.
- The WAX trial supports considering weight-bearing from week 2 in appropriately selected adults after ankle fracture surgery. It does not establish immediate unprotected walking for every patient.
- Do not assume routine syndesmotic screw removal is required before loading. The surgeon determines indications for removal and subsequent management; RODEO supports on-demand rather than universal routine removal.

Related resources

- Lateral malleolus fracture — rehabilitation after fixation
- Bimalleolar ankle fracture — rehabilitation after fixation
- All published foot and ankle protocols

References and evidence

Verified publications and evidence limitations

1. Early versus delayed weight-bearing following operatively treated ankle fracture (WAX): a non-inferiority, multicentre, randomised controlled trial. The Lancet. 2024. DOI: 10.1016/S0140-6736(24)00710-4.
2. Early Weightbearing and Range of Motion Versus Non-Weightbearing and Immobilization After Open Reduction and Internal Fixation of Unstable Ankle Fractures: A Randomized Controlled Trial. Journal of Orthopaedic Trauma. 2016. DOI: 10.1097/BOT.0000000000000572.
3. Functional outcome of routine versus on-demand removal of the syndesmotic screw: a multicentre randomized controlled trial. The Bone & Joint Journal. 2021. DOI: 10.1302/0301-620X.103B11.BJJ-2021-0348.R2.

Research informs protection and progression decisions; it does not validate every illustrated exercise or example dose. Procedure details, tissue condition and the individual plan determine application.

Glossary

ROM

Joint range of motion. Active movement uses your own muscles; assisted movement uses additional help.

Non-weight-bearing

No body-weight transfer through the operated foot during standing and walking.

As tolerated

Once this pathway is authorised: loading limited by symptoms and movement quality within prescribed protection. It is not permission for unrestricted sport.

Walker

A walking boot is a protective ankle-foot support. A walking frame is a separate mobility aid.

Educational material. Version 19 October 2026. The individual postoperative plan takes priority.

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