

# Enabling rapid decisions on cover and entitlement for foot and ankle injuries

Conditions: lateral collateral ligament pathology and post-traumatic osteoarthritis

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This information has been developed by the New Zealand Foot and Ankle Society, in association with the New Zealand Orthopaedic Association (NZOA), together with ACC's Clinical Services. It outlines factors and information ACC staff consider when making decisions on cover and entitlement requests.

## How you can help us make a rapid decision

It's important that we make decisions for our clients as quickly as possible, especially when, for some, getting surgery sooner is likely to lead to a better outcome.

ACC funding of elective surgery is considered on a case-by-case basis. When we make a decision, it's based on information provided in the Assessment Report and Treatment Plan (ARTP), contemporaneous clinical information and imaging reports provided, along with information we already hold.

## ACC assessment of surgery funding requests

ACC is required to ensure that its funding decisions comply with its legislation. The need to establish a causal link between a condition to be addressed and an accepted ACC-covered injury is critical to this assessment.

The funding application for surgery must be related to an accepted ACC claim. In the absence of a covered claim ACC will not progress the application.

It should be noted that a temporal attribution of symptoms to an injury is not sufficient evidence of causation.

## Consideration factors

ACC has developed a set of general consideration factors for surgery funding requests. This can be found on [acc.co.nz](https://acc.co.nz), and is applicable across all types of surgery.

This document focuses specifically on two ankle conditions:

- [Lateral collateral ligament pathology](#)
- [Post-traumatic osteoarthritis](#)

# Lateral collateral ligament pathology

**Table 1:** Factors to consider in decisions on lateral collateral ligament pathology

## IMPORTANT:

The factors are not to be considered in isolation; rather the overall balance of factors that are more supportive or less supportive of a causal link must be considered.

### Factors MORE SUPPORTIVE of a causal link

#### History and mechanism of accident

- a. Inversion stress mechanism of injury (+/- plantarflexion).
- b. Reported and clinically documented recurrent mechanical instability events following the original injury. (Mechanical instability involves true giving way/instability. This is different from a lack of confidence in the ankle caused by pain and/or weakness i.e. functional instability/pseudo-instability).
- c. No previous history of ankle instability.
- d. No history mismatch between the history recorded in the ARTP and the contemporaneous medical records.

#### Clinical examination findings

- a. Contemporaneous record of lateral ankle signs including acute pain, swelling, bruising, tenderness, loss of function and difficulty weight bearing around the time of injury.
- b. Clinically demonstrable anterior drawer +/- talar inversion instability (may include sulcus sign) compared to opposite side.

### Factors LESS SUPPORTIVE of a causal link

#### History and mechanism of accident

- a. Absence of inversion stress in the mechanism (+/- plantarflexion).
- b. No mechanical instability reported. (Mechanical instability involves true giving way/instability. This is different from a lack of confidence in the ankle caused by pain and/or weakness i.e. functional instability/pseudo-instability.)
- c. Isolated functional instability.
- d. Previous history of ankle instability in the absence of a relevant claim(s).
- e. Unexplained mismatch between the history recorded in the ARTP and the contemporaneous medical records.

#### Clinical examination findings

- a. Absence of lateral ankle signs described in the contemporaneous records.
  - b. Absence of clinically demonstrable anterior drawer +/- talar inversion instability compared to opposite side.
- Note: The presence of cavovarus and generalised ligamentous laxity does not preclude acute traumatic lateral collateral ligament injury.

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**X-rays:** X-rays should be weight bearing.

**Imaging and diagnostics**

- a. Absence of osteoarthritis.
- b. Other less common associated features:
  - Avulsion fracture (flake) of the lateral malleolus at the lateral ligament origin.
  - Avulsion (flake) fracture of the talar neck at the anterior talofibular ligament insertion and/or medial malleolus.
    - Focal osteochondral fracture/injury.
    - Comparative stress views demonstrating:
      - Anterior subluxation of the talus on the tibia.
      - Increased talar tilt on inversion stress.
- c. Subsequent imaging may demonstrate:
  - Ossicles in the medial gutter consistent with previous deltoid ligament injury.
  - Chronic lateral collateral ligament deficiency leading to anteromedial impingement spurs and/or early varus osteoarthritis.

Note: Latency of imaging is relevant (i.e. time passed since injury and imaging may explain interval change).

**Imaging and diagnostics**

- a. Presence of osteoarthritis indicates chronicity. Latency of imaging is relevant (i.e. time passed since injury and imaging may explain interval change).

Note: The presence of cavovarus does not preclude acute traumatic lateral collateral ligament injury.

**Ultrasound:** Ultrasound is not indicated for evaluating lateral ligament rupture.

Complete disruption of the anterior talofibular ligament (ATFL), particularly if accompanied by calcaneofibular (CFL) disruption.

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**MRI:** MRI is indicated to exclude/confirm co-existent pathology especially in the case of instability and pain; may not be necessary for the diagnosis of lateral ligament rupture if specialist clinical assessment is diagnostic.

- a. Complete disruption of the ATFL, particularly if accompanied by CFL disruption.

Additional supporting features include:

- b. Accompanying medial talocrural impaction indicative of a more severe injury pattern (e.g. bone marrow oedema or deep deltoid ligament injury).
- c. Accompanying syndesmosis injury indicative of a more severe injury pattern.
- d. Accompanying focal osteochondral fracture/injury, traumatic peroneal tendon tear and/or retinacular disruption.

Note: A mechanically deficient lateral collateral ligament may appear in continuity. This may be caused by congenital laxity, attrition or a healed ligament tear (>6 months). Latency of imaging is relevant (i.e. time passed since injury and imaging may explain interval change).

Osteoarthritis indicates chronicity. Latency of imaging is relevant (i.e. time passed since injury and imaging may explain interval change).

Note: The presence of osteoarthritis does not preclude acute traumatic lateral collateral ligament injury.

**Table 2:** Specific factors to consider regarding accepted management of lateral collateral ligament pathology, once a decision on causal link has been made

**Factors MORE SUPPORTIVE of accepted management**

**Nature of the surgical procedures requested**

- a. The choice of procedure will be dictated by the nature of the ligament pathology found to obtain anatomical reconstruction instead.
- b. Isolated ATFL reconstruction may be acceptable with recurrent clinically documented mechanical instability.
- c. Use of synthetic augments is accepted.
- d. Arthroscopy may be appropriate if intra-articular pathology is identified.
- e. Use of allografts will be considered on a case-by-case basis by the ACC Clinical Advisory Panel (CAP). Consideration will be given to:
  - A previous autograft reconstruction that has failed and requires revision.
  - Surgical reconstruction that requires the use of multiple ligament transfers.
  - Medical conditions (e.g. collagen disease, anatomic anomaly) that preclude the use of autograft tissue.

Note: A subgroup of patients may require hindfoot varus re-alignment surgery and/or peroneal tendon reconstruction. The surgical ARTP should provide clear clinical reasoning for the CAP consideration. The CAP will consider the nature of the surgical procedure(s) that have been requested in relation to the covered injury.

**Response to non-operative rehabilitation**

- a. Evidence of failed active non-operative rehabilitation is required (>12 weeks).
- b. Clients with recurrent injuries who have previously participated in active non-operative rehabilitation may not require this.

**Factors LESS SUPPORTIVE of accepted management**

**Nature of the surgical procedures requested**

No factors have been identified.

**Response to non-operative rehabilitation**

- a. No evidence of active non-operative rehabilitation in the absence of mitigating features.

# Post-traumatic ankle osteoarthritis

Post-traumatic ankle osteoarthritis may be the consequence of fractures that disrupt the articular surface or chronic ankle joint instability (Schenker et al, 2014). The literature on ankle osteoarthritis is more limited than on the hip and knee osteoarthritis. Nevertheless, relevant literature cites trauma as the most common cause of ankle osteoarthritis (Saltzman et al, 2005; Valderrabano et al, 2009; Nwankwo et al, 2019).

**Table 3:** Factors to consider in decisions on post-traumatic ankle osteoarthritis

**IMPORTANT:**

The factors are not to be considered in isolation; rather the overall balance of factors that are more supportive or less supportive of a causal link must be considered.

**Factors MORE SUPPORTIVE of a causal link**

**History and mechanism of accident**

- Two primary categories:
1. *Significant ligamentous injury at the time of accident, along with evidence of:*
    - a. At least one complete ankle ligament disruption (e.g. lateral collateral ligament, deltoid ligament/avulsion or syndesmosis).

AND

    - b. Reported and clinically documented recurrent mechanical instability.
  2. *Osteochondral fracture/injury at the time of accident, including:*
    - a. Traumatic full thickness osteochondral fracture/injury.
    - b. Intra-articular ankle fracture.
    - c. Fracture malunion causing altered mechanics (e.g. varus malunion or talar shift).

**Clinical examination findings**

Pain and loss of function attributable to the osteoarthritis.

**Factors LESS SUPPORTIVE of a causal link**

**History and mechanism of accident**

- In the two categories discussed:
1. Absence of significant ligamentous injury at the time of accident, including:
    - a. Absence of clinically documented recurrent mechanical instability episodes.

AND

    - b. Intact ligaments.
  2. *Absence of osteochondral fracture/injury at the time of accident, including:*
    - a. Absence of traumatic full thickness osteochondral fracture/injury.
    - b. Ankle fracture without evidence of intra-articular displacement or malunion.
    - c. Inflammatory arthritis (such as rheumatoid arthritis).

**Clinical examination findings**

Continued ...

**Imaging and diagnostics**

- a. Imaging not demonstrating osteoarthritis at the time of injury.
  - b. If available, imaging findings from the time of injury demonstrating:
    1. At least one complete ankle ligament disruption (e.g. lateral collateral ligament, deltoid ligament or syndesmosis).
- and/or
2. Traumatic full thickness osteochondral fracture/injury.
  3. Intra-articular ankle fracture.
  4. Fracture malunion causing altered mechanics (e.g. varus malunion or talar shift).
- c. Subsequent imaging demonstrating osteoarthritis and/or:
  1. Ossicles in the medial gutter consistent with previous deltoid ligament injury.
  2. Chronic lateral collateral ligament deficiency leading to anteromedial impingement spurs and/or early varus osteoarthritis.

Note: Latency of imaging is relevant (i.e. time passed since injury and imaging may explain interval change).

**Historical operative findings (if applicable)**

- Operative records confirming:
1. No osteoarthritis at the time of surgery; and/or
  2. Traumatic full thickness osteochondral fracture/injury.

**Imaging and diagnostics**

- a. Imaging confirming osteoarthritis at the time of injury. Latency of imaging is relevant (i.e. time passed since injury and imaging may explain interval change).
- b. Comparable primary osteoarthritis in the contralateral ankle (if images available) without a history of traumatic origin.
- c. Imaging and diagnostics consistent with inflammatory arthritis (such as rheumatoid arthritis).
- d. Imaging and diagnostics consistent with crystal arthropathy (such as gout/ pseudogout).

**Historical operative findings (if applicable)**

- Operative records confirming osteoarthritis at the time of surgery. Latency of operative record is relevant (i.e. time passed since injury and imaging may explain interval change).

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### Disclaimer

All information in this publication was correct at the time of printing. This information is intended to serve only as a general guide to arrangements under the Accident Compensation Act 2001 and regulations. For any legal or financial purposes this Act takes precedence over the contents of this guide.