

# Single-Window Versus Two-Window Posterolateral Approach for Malleolar Fractures

NCT07481266

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Status	RECRUITING
Phase	Not Applicable
Sponsor	muhammed k111ç
Enrollment	100 participants

## Key Eligibility Criteria

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### Inclusion (4)

- Patients aged between 18 and 65 years.
- Diagnosis of an acute, closed, unstable rotational ankle fracture with concomitant involvement of the posterior malleolus and lateral malleolus (trimalleolar or bimalleolar equivalent fractures).
- Fracture morphology explicitly indicating surgical reduction and internal fixation via a posterolateral approach (e.g., Bartonicek Type II, III, or IV).
- Ability to provide informed consent and willingness to comply with the 12-month postoperative rehabilitation and follow-up protocol.

### Exclusion (5)

- Open fractures, severe tibial pilon variants, or fractures with intra-articular comminution extending beyond the posterior malleolus.
- Persistent Syndesmotic Instability: Patients demonstrating persistent distal tibiofibular syndesmotic instability (confirmed by intraoperative hook test) after the fixation of the posterior and lateral malleoli, which inherently requires additional trans-syndesmotic fixation (e.g., syndesmotic screws or suture-button devices). This exclusion is strictly applied to eliminate methodological bias, as the experimental single-window approach intentionally restricts direct lateral access for trans-syndesmotic interventions.
- Delayed surgical intervention exceeding 7 days from the initial trauma, leading to organized hematoma or compromised soft-tissue envelopes.
- Pre-existing conditions detrimental to soft-tissue healing and functional assessment, including severe peripheral arterial disease, uncontrolled diabetes mellitus with neuropathy, or severe ipsilateral ankle osteoarthritis.
- Previous history of ipsilateral ankle fractures or surgeries.

## Locations (1 total)

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Ankara Bilkent City Hospital, Ankara, Turkey (Türkiye)