

THE EFFECTIVENESS OF EARLY WEIGHT BEARING
AND MOBILISATION IN POST-OPERATIVE ANKLE
OPEN REDUCTION INTERNAL FIXATION PATIENTS:
A SYSTEMATIC LITERATURE REVIEW

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ETHICS: UNIVERSITY OF CHICHESTER (PHYSIO_2526_01)
THEMES: REHABILITATION CHALLENGE (QUANTITATIVE)



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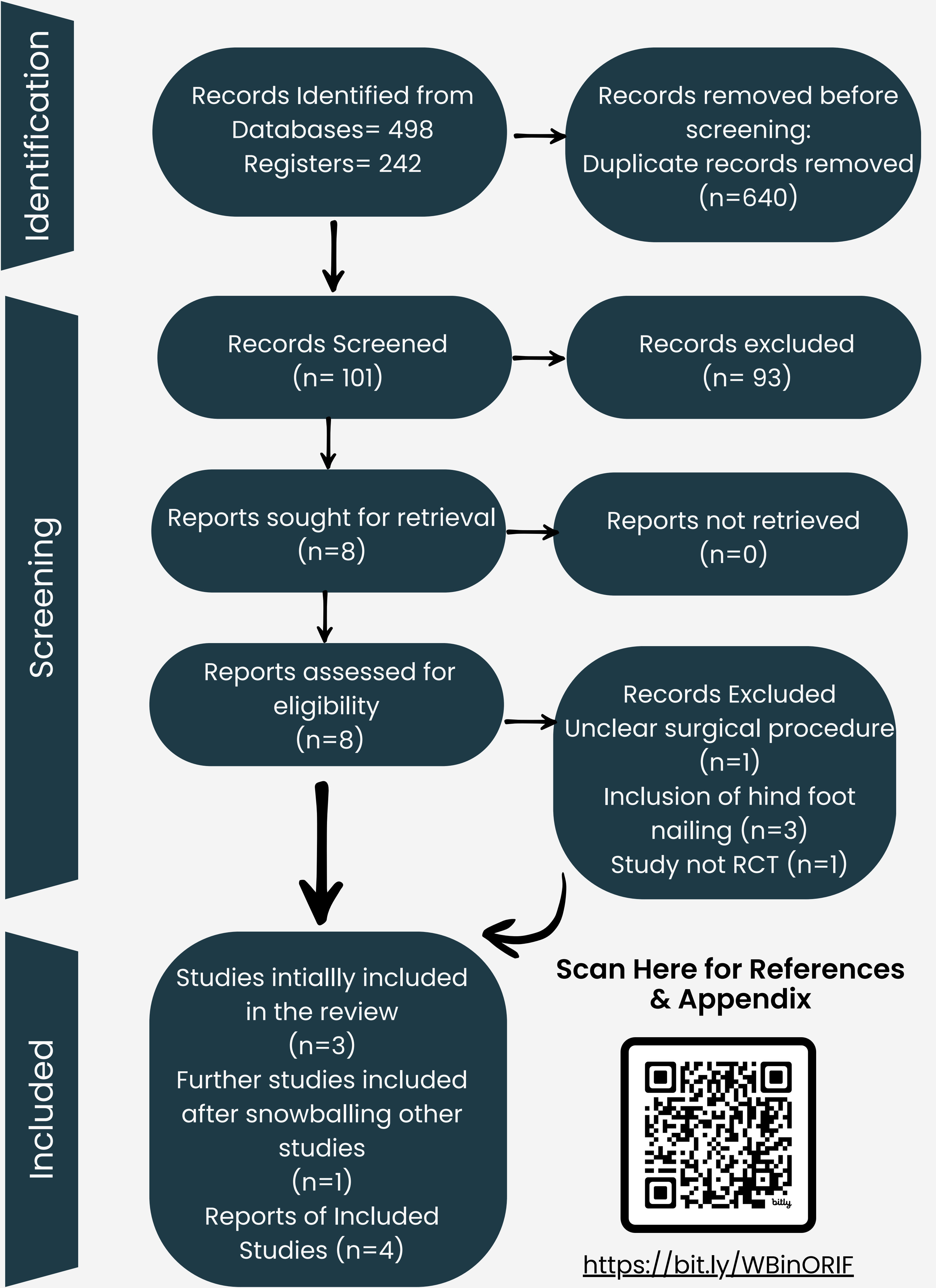
BACKGROUND AND OBJECTIVES

- Ankle fractures are common, often treated with open reduction internal fixation (ORIF)
- Standard post-op care = delayed weight bearing, but evidence for early weight bearing (EWB) after surgery is inconsistent.
- **Objective:** To systematically review RCTs comparing EWB vs non-weight-bearing (NWB) following ankle ORIF, assessing function, return to work, complications, and patient satisfaction.

METHODS

- PROSPERO registered; 14 databases searched and 2 registries (2000–2025).
- RCTs only; PRISMA and SWIM methodology.
- Exclusion: Non-English papers, non-peer reviewed, no comparable ORIF periods, no additional lower limb procedures
- Appraisal: PEDro scale.
- 3 blinded investigators; search strategy agreed by an expert panel

PRISMA



RESULTS

Paper	N / Duration	Intervention	Main Outcomes	Key Findings
Park et al. 2021	N=104 / 12 mo	EWB @ 2 wks vs NWB @ 6 wks	OMAS, RTW, satisfaction	EWB ↑ OMAS (short-term), earlier RTW (p<0.001), no ↑ complications
Schubert et al. 2020	N=50 / 6 mo	EWB @ 2 wks vs NWB @ 6 wks	EQ-5D, OMAS, satisfaction	EWB ↑ EQ-5D @ 6 wks (p=0.014); no long-term differences; mixed complications
Dehghan et al. 2016	N=110 / 12 mo	EWB @ 2 wks vs NWB @ 6 wks	RTW, OMAS, complications	EWB ↑ OMAS @ 6 wks (p<0.001); hardware removal higher in NWB; no long-term differences
Honigman n et al. 2007	N=45 / 10 wks	Early WB (orthosis, full WB ~2 wks) vs delayed WB	OMAS, RTW	No sig. differences; both groups fully healed; no complications

Table 1: Summary of Findings. EWB: Early weight bearing, NWB: Non-weight bearing. OMAS: Olerud–Molander Ankle Score, EQ-5D: EuroQoL 5-Dimension, RTW: Return to work. ↑ / ↓ : Improvement/decline in outcome, Sig- statistically significant

- Functional outcomes: two studies found better short-term OMAS scores with EWB (p < 0.001); no long-term differences at 12 months.
- Complications: Similar across studies, with fewer hardware removals in EWB (Dehghan et al., p = 0.005).
- Return to work: Mixed results, minor early advantage for later weight bearing in one study
- Satisfaction: No significant difference, though EWB trends were slightly more positive

CONCLUSION & CLINICAL IMPLICATIONS

- EWB appear to be safe and offers early functional benefit.
- No evidence of increased complications.
- Supports earlier mobilisation guidelines; larger long-term RCTs needed.