

Black JD, Bhavikatti M, et al. Early weight-bearing in operatively fixed ankle fractures: a systematic review. Foot 2013;23(2-3):78-85.

Design: systematic review of randomized trials and observational studies

Purpose of study: to compare the outcomes of early and delayed weight-bearing rehabilitation strategies in the setting of operative fixation of ankle fractures

Reasons not to cite as evidence:

- The authors found an evidence base which had significant methodological limitations, with no randomized studies having all four criteria of concealed allocation, baseline comparability, blinded assessment of outcome, and 85% followup or better
- The outcome reporting for many studies was often not reported in a quantitative enough manner to yield clear estimates of effect sizes
- However, there are trends which favor early weight bearing, which provide useful information for postoperative rehabilitation of surgically treated ankle fractures
 - o The early weight bearing studies mostly allowed some weight bearing on the first postoperative day with either a plaster cast or with an air stirrup brace
 - o The delayed weight bearing studies generally deferred weight bearing to the fourth week after surgery
- Importantly, there was no evidence that early weight bearing was harmful in comparison with late weight bearing
 - o Pain scores were no worse with early weight bearing
 - o Range of motion had a trend favoring early weight bearing
 - o Calf and ankle circumference as a marker of muscle wasting did not show differences between timing of weight bearing
 - o Return to work was quicker with early weight bearing in a nonrandomized study, and there was a trend towards quicker return to work in two low quality studies
 - o There was no evidence that radiological outcomes, such as widening of the ankle mortise, was different between early and later weight bearing
 - o The rate of complications was not worse with early than with late weight bearing
- Therefore, the guideline would be justified in saying that there is no evidence that ankle fractures which have been surgically treated derive any benefit from delaying weight bearing beyond the first postoperative day