



Does Close Contact Casting (CCC) work just as well as surgery for management of unstable ankle fractures in older adults?

The Ankle Injury Management (AIM) randomised controlled trial

 **24** hospitals in the United Kingdom

 **620** patients took part

60+ aged 60 years and over

Study Summary

Compared open reduction and internal fixation surgery with initially attempting non-surgical management using **Close Contact Casting (CCC)**.

CCC is a minimally padded cast applied in the operating theatre by an orthopaedic surgeon after closed reduction.



CCC pathway:

- 1 Attempt aligning the fracture in operating theatre, if unable to reduce, proceed with surgery.
- 2 If CCC is applied but it cannot hold fracture in position, remove it and proceed with surgery.
- 3 Review in outpatient clinic (weekly for 3 weeks after application recommended), if reduction lost to an unacceptable extent (judgement of surgeon) then re-apply CCC in clinic or theatre, or proceed to surgery.



Four out of five participants on the CCC pathway were managed non-surgically.

Primary endpoint was patient reported ankle function at six months (Olerud and Molander Ankle Scale).



96% of participants completed the study follow-up at 6 months.

Ankle function was same (equivalent) for patients having CCC and those having surgery.



Modest cost savings over 6 months when attempting initial fracture management with CCC compared to surgery.

Longer-term follow up (median 3 years, range 2.9 to 9.5) included 73% of the trial cohort.



Ankle function remained equivalent at longer term follow-up.

Key Findings

Findings supports surgeons and patients considering non-surgical management by Close Contact Casting (CCC) as a treatment option. Patients treated with CCC need careful monitoring in the weeks after its application to monitor maintenance of fracture reduction.