

How should we treat a patient with a distal radius fracture after closed reduction? A cluster RCT

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Reduced distal radius fractures, primarily treated with a circumferential cast instead of a dorsal splint, results in less fracture re-displacement, fewer surgical interventions, less complications and lower costs.

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON27921

Bron

Nationaal Trial Register

Verkorte titel

CAST study

Aandoening

Displaced distal radius fractures, suitable for conservative treatment after reduction.

Ondersteuning

Primaire sponsor: ZonMw

Overige ondersteuning: ZonMw

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Toelichting onderzoek

Achtergrond van het onderzoek

Rationale:

Distal radius fractures (DRF) are the most common fractures in the adult population. There is no consensus on conservative treatment of a displaced DRF.

Objective:

To evaluate the cost-effectiveness of treatment with a circumferential cast compared to treatment with a splint, in patients with a reduced distal radius fracture. The hypothesis is that reduced distal radius fractures treated with a circumferential cast instead of a splint, results in less fracture re-displacement, fewer surgical interventions, less complications and lower costs.

Study design: Cluster randomized design, randomization will take place on hospital level. All patients will be followed for 1 year.

Study population: Adult patients with a primary displaced fracture of the radius which is treated conservatively after closed reduction.

Intervention:

In one group the fracture will be initially immobilized with a circumferential below-elbow cast. In the other group the fracture will be initially immobilized with a below-elbow splint.

Doel van het onderzoek

Reduced distal radius fractures, primarily treated with a circumferential cast instead of a dorsal splint, results in less fracture re-displacement, fewer surgical interventions, less complications and lower costs.

Onderzoeksopzet

Baseline, 1 week, 2 weeks, 6 weeks, 3 months, 6 months, 12 months

Onderzoeksproduct en/of interventie

Below-elbow circumferential casting or below-elbow splinting

Contactpersonen

Publiek

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Wetenschappelijk

Erasmus MC
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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Primary displaced distal radius fracture, treated with closed reduction. Age above 18 years

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

Failure to reach proper fracture alignment after reduction(s), insufficient command of the Dutch language, both-bone fracture (styloid fracture excluded), concomitant injuries to ipsilateral extremity, multiple trauma patient

Onderzoekopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd

Controle: Geneesmiddel

Deelname

Nederland

Status: Werving gestopt

(Verwachte) startdatum: 14-01-2020

Aantal proefpersonen: 560

Type: Werkelijke startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Ethische beoordeling

Positief advies

Datum: 14-01-2020

Soort: Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 48181

Bron: ToetsingOnline

Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL8311
CCMO	NL71020.078.19
OMON	NL-OMON48181

Resultaten

Samenvatting resultaten

B.Barvelink et al. The CAST study protocol: a cluster randomized trial assessing the effect of circumferential casting versus plaster splinting on fracture redisplacement in reduced distal radius fractures in adults. BMC Musculoskelet Disord. 2021 Apr 20;22(1):370. doi: 10.1186/s12891-021-04238-0