Temperature measurements in trauma patients with a fracture of the lower extremities in

the rehabilitation phase.

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON24369

Source
NTR

Brief title
tempfracture

Health condition

Trauma patients
fractures of the lower extremity
Temperature in Lower extremity

Sponsors and support

Primary sponsor: Netwerk Acute care Limburg Maastricht
Adelante Rehabilitation centre Hoensbroek
Source(s) of monetary or material Support: Netwerk Acute care Limburg Maastricht
Adelante Rehabilitation centre Hoensbroek

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Intervention

Outcome measures

Primary outcome

The difference in temperature measured between the affected and unaffected leg.

Secondary outcome

Complication

Study description

Background summary

At the moment of writing there is no information in the literature about the

temperature in the affected limb in trauma patients with a fracture of the lower extremities. It is

unknown if there is a variation in temperature over time in patients with a fracture of the lower

extremities that have permissive weight bearing. Patients who have had a fracture of the lower

extremities are at risk of overload during early mobilization. It is conceivable that pressure or

overpressure causes a change of temperature in the affected limb. However, there are no known studies

that substantiate this, most likely because there is currently no system that easily ambulatory measures

the temperature. The ambulatory measurement of the temperature during the rehabilitation process

could give more insight into the consequences of load or overload of the affected leg. To do

this in the

future we will develop an ambulatory measurement system consisting of a temperature sensor that can

be worn around the ankle. Can we demonstrate differences in temperature of the part relative to

contralateral side? Is this inflammatory response useful as feedback for patients and therapists to better

individualize the weight bearing? This study is designed to see if it is possible to reliably measure the

temperature of the skin at the height of the ankles during weight bearing. The study population is

trauma patients with a fracture of the lower extremities that are clinically admitted in Adelante

Rehabilitation Centre.

Study objective

Investigate whether it is possible to reliably measure the temperature of the lower

extremities by means of a temperature sensor on both ankles of the rehabilitants and follow the

temperature longitudinally through time. An increase in temperature at the height of the ankle is a sign

of overload and requires adaptation of the rehabilitation program.

Study design

At the end of the day the temperature will be measured. If there is an increase in

temperature and the patient is having complaints, the rehabilitation program will be adapted.

Intervention

One sensor per leg will be placed at the height of the ankle of both legs on trauma

patients who have had a fracture of the lower extremities.

Contacts

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Eligibility criteria

Inclusion criteria

Trauma patients with fractures of the lower extremities, including pelvic

fractures.

Exclusion criteria

Amputation patients (thigh,leg,foot) and bilateral fracture of the lower

extremities.

Study design

Design

Study type:	Observational non invasive
Intervention model:	Parallel
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-10-2015
Enrollment:	20
Type:	Anticipated

Ethics review

Positive opinion

Date:	20-08-2015
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL5224

Register	ID
NTR-old	NTR5373
Other	METC Heerlen : 15-N-137a

Study results