Joint distraction in the treatment of knee osteoarthritis: efficacy and underlying mechanisms

| Submission date | Recruitment status | Prospectively registered | | |
|-------------------|--------------------------|-----------------------------|--|--|
| 26/02/2007 | No longer recruiting | ☐ Protocol | | |
| Registration date | Overall study status | Statistical analysis plan | | |
| 26/02/2007 | Completed | [X] Results | | |
| Last Edited | Condition category | Individual participant data | | |
| 20/08/2021 | Musculoskeletal Diseases | | | |

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

Study information

Scientific Title

Joint distraction in the treatment of knee osteoarthritis: efficacy and underlying mechanisms

Study objectives

Joint distraction is a relatively new approach in the treatment of severe Osteoarthritis (OA). Clinical efficacy has been proven for hip and ankle OA.

Hypothesis:

A two month distraction period results in similar clinical beneficial effects as a three month distraction period.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approval received from the Medical Ethical Committee of the University Medical Centre Utrecht on the 28th July 2004.

Study design

Non-randomised, non-controlled, interventional clinical trial

Primary study design

Interventional

Secondary study design

Single-centre

Study setting(s)

Other

Study type(s)

Treatment

Participant information sheet

Health condition(s) or problem(s) studied

Osteoarthritis

Interventions

Joint distraction applies temporary (two months) relief of mechanical wear and tear of the articular cartilage surfaces forming a joint. Nutrition of the cartilage is maintained due to intra-articular fluid pressure changes during treatment. Additionally subchondral sclerosis is diminished, diminishing mechanical stresses on the cartilage after treatment.

Intervention Type

Other

Phase

Not Specified

Primary outcome measure

Pain (according to the The Western Ontario and McMaster Universities Osteoarthritis Index [WOMAC])

Secondary outcome measures

Functional disability (according to the WOMAC)

Overall study start date

28/07/2004

Completion date

01/03/2010

Eligibility

Key inclusion criteria

- 1. Age less than 55 years
- 2. Osteoarthritis, primary in the tibio-femoral joint, uni or bilateral
- 3. Severe osteoarthritis considered for joint replacement surgery/osteotomy

Participant type(s)

Patient

Age group

Adult

Sex

Not Specified

Target number of participants

3

Key exclusion criteria

- 1. Osteoarthritis in both knees
- 2. Primary retro-patellar osteoarthritis
- 3. Deviation of the mechanical axis greater than 10 ° (independent of cartilage damage)
- 4. Primary intra-articular inflammation
- 5. Psychological problems, not allowing two months distraction

Date of first enrolment

28/07/2004

Date of final enrolment

01/03/2010

Locations

Countries of recruitment

Netherlands

Study participating centre
University Medical Centre Utrecht (UMCU)

Utrecht Netherlands 3508 GA

Sponsor information

Organisation

University Medical Centre Utrecht (UMCU) (The Netherlands)

Sponsor details

Department of Rheumatology and Clinical Immunology P.O. Box 85500 Utrecht Netherlands 3508 GA

Sponsor type

Hospital/treatment centre

Website

http://www.umcutrecht.nl/zorg/

ROR

https://ror.org/04pp8hn57

Funder(s)

Funder type

Charity

Funder Name

Dutch Arthritis Association (Reumafonds) (The Netherlands)

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|-----------------|---------|--------------|------------|----------------|-----------------|
| Results article | | 12/05/2011 | 20/08/2021 | Yes | No |