

Application of static magnetic fields versus copper for the relief of pain in osteoarthritis: a randomised double-blind placebo controlled trial

Submission date 15/10/2004	Recruitment status No longer recruiting	☒ Prospectively registered
Registration date 06/12/2004	Overall study status Completed	☐ Protocol
Last Edited 07/03/2017	Condition category Musculoskeletal Diseases	☐ Statistical analysis plan
		☐ Results
		☐ Individual participant data
		☐ Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

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Additional identifiers

Study information

Scientific Title

Application of static magnetic fields versus copper for the relief of pain in osteoarthritis: a randomised double-blind placebo controlled trial

Acronym

MACROPOD (Magnetic And Copper therapy for the Relief Of Pain in Osteoarthritis: a randomised Double-blind placebo-controlled trial)

Study objectives

Study aims:

1. To investigate the therapeutic efficacy of commercially available magnetic and copper bracelets as an adjunct to practitioner led management of osteoarthritic pain
2. To evaluate the potential economic impact of static magnetic therapy (SMT) and to gather evidence relating to safety of the devices under investigation
3. To address both local and more widespread needs in terms of providing rigorous scientific evidence relating to the efficacy of magnetic and copper bracelets

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Primary study design

Interventional

Study design

Randomised double-blind placebo controlled trial

Study type(s)

Not Specified

Health condition(s) or problem(s) studied

Osteoarthritis

Interventions

The trial will use a randomised double-blind placebo controlled crossover design. All participants will undertake one of four randomly allocated treatment sequences consisting of four phases (one active and three control). During the active phase participants will wear the MagnaMax® static magnetic device for a period of four weeks. During the three control (placebo) phases, which will each last for four weeks, all participants will in turn wear: an otherwise identical low strength static magnetic device, a demagnetised device and a copper bracelet.

Intervention Type

Other

Phase

Not Specified

Primary outcome(s)

Not provided at time of registration

Key secondary outcome(s)

Not provided at time of registration

Completion date

31/12/2006

Eligibility**Key inclusion criteria**

1. 18 years of age or over
2. Diagnosis of osteoarthritis
3. In receipt of prescribed non-steroidal anti-inflammatory drugs (NSAIDs) and opioid/opioid compound analgesic medication
4. Responsible for administering own medication
5. Reporting pain associated with osteoarthritis

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 Years

Sex

Not Specified

Key exclusion criteria

1. Confounding medical condition/disease
2. Pain lasting less than 6 weeks in total duration prior to recruitment
3. Pacemaker, insulin pump or similar device fitted
4. Pregnant women

Date of first enrolment

01/01/2005

Date of final enrolment

31/12/2006

Locations**Countries of recruitment**

United Kingdom

England

Study participating centre
301 Hertford Building
Hull
United Kingdom
HU6 7RX

Sponsor information

Organisation
The University of Hull (UK)

ROR
<https://ror.org/04nkhwh30>

Funder(s)

Funder type
Hospital/treatment centre

Funder Name
Wolds Primary Care Research Network (WOREN) and West Hull Primary Care Trust (uk)

Results and Publications

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?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes