A randomised, double-blind, placebocontrolled, dose-ranging two-centre study to evaluate the efficacy and safety of Devil's Claw in the treatment of knee and hip osteoarthritis

Submission date	Recruitment status Stopped	Prospectively registered		
13/11/2006		☐ Protocol		
Registration date	Overall study status Stopped	Statistical analysis plan		
13/12/2006		[X] Results		
Last Edited	Condition category Musculoskeletal Diseases	Individual participant data		
05/08/2021		Record updated in last year		

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

ClinicalTrials.gov (NCT)

NCT00295490

Protocol serial number

Study information

Scientific Title

A randomised, double-blind, placebo-controlled, dose-ranging two-centre study to evaluate the efficacy and safety of Devil's Claw in the treatment of knee and hip osteoarthritis

Study objectives

- 1. Devil's Claw has anti-inflammatory properties (as assessed by the reduction in pain, stiffness and disability aspects on the Western Ontario and McMaster Universities Arthritis Index [WOMAC]) in chronic osteoarthritis (OA) of the knee and/or hip after 16 weeks of treatment, as compared to placebo.
- 2. A dose response effect exists in the treatment of osteoarthritis of the knee/hip by Devil's Claw.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Southampton and South West Hampshire, Local Research Ethics Committees, approval: 14/04/2004, ref: LREC 049/04/t

Study design

Randomised double-blind placebo-controlled dose-ranging two-centre study

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Osteoarthritis of knee and/or hip

Interventions

Patients randomised to one of four groups:

- 1. Placebo medication
- 2. Devil's Claw (240 mg/d extract, equivalent dose of 2.4 4.8 mg/d)
- 3. Devil's Claw (960 mg/d extract, equivalent dose of 9.6 19.2 mg/d)
- 4. Devil's Claw (1920 mg/d extract, equivalent dose of 19.2 40.4 mg/d)

Intervention Type

Drug

Phase

Not Applicable

Drug/device/biological/vaccine name(s)

Devil's Claw (Harpagophytum procumbens)

Primary outcome(s)

Reduction in WOMAC total score from baseline to week 16.

Key secondary outcome(s))

- 1. Secondary efficacy analysis
- 2. Change in WOMAC subscales (pain, stiffness, disability) from baseline to end of treatment at week 16
- 3. Quality of Life assessments (Short Form health survey [SF-36])
- 4. Changes in the subject's well-being
- 5. Changes in subject's overall global assessment
- 6. Changes in attitudes and health beliefs to Complementary/Alternative Medicine (CAM)
- 7. Group differences between adverse event reporting

Completion date

30/09/2008

Reason abandoned (if study stopped)

Lack of funding/sponsorship

Eligibility

Key inclusion criteria

- 1. Patients with either a pragmatic diagnosis of:
- 1.1. Osteoarthritis of the knee, with no other known rheumatological condition and who report the following clinical features (based on the American College of Rheumatology [ACR] classification for knee OA1):
- 1.1.1. Knee pain on most days of the previous month
- 1.1.2. Morning stiffness of less than 30 minutes duration
- 1.1.3. "Stiffness" in resting the joint, and
- 1.1.4. Aged over 40 years
- 1.2. Osteoarthritis of the hip, with no other known rheumatological condition and who report the following clinical features (based on the ACR classification for hip OA2) hip pain on most days of the previous month and at least two of the following three features:
- 1.2.1. Erythrocyte sedimentation rate (ESR) less than 20 mm/hour
- 1.2.2. Radiographic femoral or acetabular osteophytes
- 1.2.3. Radiographic joint space narrowing (superior, axial and/or medial), and
- 1.2.4. Aged over 45 years of age

The diagnosis of osteoarthritis will be confirmed by X-ray.

- 2. Only patients who have grade 2 to 4 of the Kellgren and Lawrence scale will be recruited (The Kellgren and Lawrence scale ranges from grade zero to grade four where grades zero and one represent doubtful osteoarthritic changes and therefore a doubtful diagnosis)
- 3. Patients who have been on stable medication (conventional or complementary, including nutritional medicine) for the past three months, but are still getting symptoms (incomplete responders)
- 4. Only those patients who record baseline pain scores on the WOMAC scale of at least 20 mm on the Visual Analogue Scale (VAS) for a minimum of six out of seven days monitored during the period from Clinic Visit one (screening) and Clinic Visit two (baseline)
- 5. Ability to comply with the requirements of the study and to give informed consent
- 6. For women of child-bearing potential: negative pregnancy test

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

- 1. Participation in an investigational trial within 30 days prior to enrolment
- 2. Previous treatment with Devil's Claw within 90 days prior to enrolment
- 3. Patients awaiting a replacement knee or hip joint
- 4. Patients with other conditions that cause pain
- 5. Patients with congenital dislocation of the hip
- 6. Patients who have had operations on their hip due to previous trauma
- 7. Patients with severe co-morbidities including severe cardiac or pulmonary disease and cancer
- 8. Dementia, psychoses, or other significant impairment of mental status that would prohibit sufficient comprehension, provision of informed consent and to allow undertaking of the necessary self-care or toxicity reporting
- 9. Patients taking corticosteroid medication
- 10. Known allergies against any of the ingredients of the treatments
- 11. Patients who would be unable to complete the self assessment forms, or to attend for X-ray and clinical examination
- 12. Patients with other known rheumatic disease such as rheumatoid arthritis
- 13. Patients with the diagnosis gout
- 14. Patients who report a red or hot swollen joint (which is unlikely to be due to OA), and would require further rheumatological assessment
- 15. Patients with conditions known to be contraindicated to the study medication i.e. patients with gastric or duodenal ulcers; gallstones; patients taking drugs for arrhythmias; patients with heart failure
- 16. Patients who are pregnant, trying to become pregnant or breastfeeding

Date of first enrolment

12/12/2004

Date of final enrolment

30/09/2008

Locations

Countries of recruitment

United Kingdom

England

Study participating centre University of Southampton Southampton United Kingdom SO16 5ST

Sponsor information

Organisation

University of Southampton (UK)

ROR

https://ror.org/01ryk1543

Funder(s)

Funder type

Research organisation

Funder Name

Southampton Complementary Medicine Research Trust (UK)

Funder Name

University of Southampton (UK)

Alternative Name(s)

University of Southampton UK

Funding Body Type

Government organisation

Funding Body Subtype

Universities (academic only)

Location

United Kingdom

Funder Name

Pascoe Pharmazeutische Praparate GmbH (Germany)

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?
Basic results		09/09/2011		No	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes