A Randomized Controlled Trial of AttraX® Putty vs. conventional open-wedge osteotomy without gap filler in open-wedge wedge osteotomy

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The main aim of this study is to determine whether early postoperative pain is decreased when the osteotomy gap is filled with AttraX® Putty, compared to conventional open wedge osteotomy without filling the gap. The secondary aims are faster...

Ethical reviewApproved WMOStatusRecruitingHealth condition typeOther conditionStudy typeInterventional

Summary

ID

NL-OMON53187

Source

ToetsingOnline

Brief title

AXOS

Condition

- Other condition
- Joint disorders

Synonym

arthrosis, Unicompartimental osteoarthritis

Health condition

Standsafwijking

Research involving

Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Utrecht **Source(s) of monetary or material Support:** Nuvasive

Intervention

Keyword: Gap filler, Osteotomy, Postoperative pain, Randomized controlled trial

Outcome measures

Primary outcome

The main study endpoint is the mean NRS pain during the first week postoperative.

Secondary outcome

The secondary study endpoints are faster accelerated rehabilitation/regaining function, reduction of local blood loss, accelerated, bone union, and comparable surgical feasibility

Study description

Background summary

Realignment osteotomies around the knee are a proven surgical treatment for unicompartmental knee osteoarthritis and a malalignment. Osteotomies can be very painful in the early postoperative phase. This is probably due to a combination of bony cut (bone pain) and postoperative hematoma (bleeding and leakage of the bone marrow) in the surrounding soft tissue. The AttraX® Putty can be used as a gap filler in open wedge osteotomies to potentially reduce postoperative pain by reducing the bleeding from the bone gap.

Study objective

The main aim of this study is to determine whether early postoperative pain is decreased when the osteotomy gap is filled with AttraX® Putty, compared to

2 - A Randomized Controlled Trial of AttraX® Putty vs. conventional open-wedge oste ... 29-05-2025

conventional open wedge osteotomy without filling the gap. The secondary aims are faster accelerated rehabilitation/regaining function, reduction of local blood loss, accelerated bone union, and comparable surgical feasibility.

Study design

Single-blinded, prospective, randomized controlled trial.

Intervention

According to a randomization scheme, the osteotomy gap will be filled with either the synthetic ceramic material AttraX® Putty or without a gap filler (conventional method).

Study burden and risks

Patients may have the advantage of experiencing less pain postoperatively if they are treated with the AttraX® Putty, which can contribute to a faster rehabilitation. Risks to the AttraX® Putty group may include an allergic reaction, failure to promote bone fusion and excessive bone growth. However, the preclinical studies and clinical studies show that the use of AttraX® Putty is safe for use in humans.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years) Elderly (65 years and older)

Inclusion criteria

- 1. Patients above 18 years with an indication for an open-wedge osteotomy of the femur, tibia or double level due to unicompartimental OA.
- 2. Comply with all aspects of the treatment, including CT scans, Xrays and 1-year follow-up
- 3. Informed consent

Exclusion criteria

- 1. Osteotomy for indication of cartilage treatment or other knee surgeries than unicompartimental OA
- 2. Correction using an open wedge above 10 mm
- 3. Pregnant women at the time of enrolment or women who are planning to become pregnant during the duration of the study
- 4. Inability to communicate in Dutch or English

Study design

Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Single blinded (masking used)

Control: Active

Primary purpose: Treatment

Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 20-09-2023

Enrollment: 40

Type: Actual

Medical products/devices used

Generic name: Attrax Putty

Registration: Yes - CE intended use

Ethics review

Approved WMO

Date: 19-07-2023

Application type: First submission

Review commission: METC NedMec

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

Other clinicaltrials.gov CCMO NL84534.041.23