

The effect of Hoffa's fat pad resection in total knee arthroplasty.

No registrations found.

Ethical review	Positive opinion
Status	Pending
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON20994

Source

NTR

Brief title

HOPE-study

Health condition

Hoffa's fat pad has been associated with anterior knee pain after total knee arthroplasty. Furthermore, fibrosis of Hoffa's fat pad due to the incision technique is associated with a decreased range of motion. It's resection is reported to result in less pain after surgery.

Sponsors and support

Primary sponsor: B.J. Burger, PhD, M.D.

CORAL, Department of Orthopaedic Surgery

Medisch Centrum Alkmaar, Wilhelminalaan 12, 1815 JD Alkmaar

Source(s) of monetary or material Support: CORAL, Department of Orthopaedic Surgery, Medisch Centrum Alkmaar

Intervention

Outcome measures

Primary outcome

1. Active and passive knee range of motion;
2. Gait parameters;
3. Walking stability and variability.

Secondary outcome

1. The prevalence and severity of (anterior) knee pain;
2. The KOOS score (Knee Injury and Osteoarthritis Outcome Score);
3. Complications and adverse events. patellar tendon length.

Study description

Background summary

Little is known about the function of Hoffa's fat pad in both the normal knee as well as in case of a knee prosthesis. Literature indicates that the fat pad may play a, possibly detrimental, role in modulating inflammatory and destructive responses in knee osteoarthritis. However, in total knee arthroplasty all cartilage is removed and this role of Hoffa's fat pad can therefore be considered irrelevant. Furthermore, Hoffa's fat pad is considered to be a source of anterior knee pain and may limit the function of the prosthetic knee, possibly in association with the prevalence of fibrosis. Henceforth our hypotheses are that resection of Hoffa's fat pad in total knee arthroplasty leads to 1) a greater range of motion and recovery of range of motion closer to the preoperative range of motion during follow-up, 2) less anterior knee pain during follow-up, 3) a faster recovery and enhanced values of gait parameters, such as preferred walking speed and variation in knee angle during walking.

Study objective

It is hypothesized that Hoffa's fat pad resection in total knee arthroplasty leads to a greater range of motion, a faster recovery of normal walking gait and preferred walking speed, less anterior knee pain, a higher KOOS score and better patient satisfaction post operatively and at follow-up.

Study design

Pre-op, day of discharge, 6 weeks post-op, 3 months post-op and 12 months post-op.

Intervention

One group will undergo Hoffa's fat pad resection and one group will not during implantation of a total knee prosthesis.

Contacts

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Eligibility criteria

Inclusion criteria

1. Patients who are planned to undergo a primary total knee arthroplasty in the Joint-Care program of the Medical Centre Alkmaar;
2. Age between 30 and 80 years;
3. Patients with ASA Physical Status I & II.

Exclusion criteria

1. Patients with another prosthesis in either one of the lower extremities;
2. Patients diagnosed with rheumatoid arthritis;

3. Patients who suffer from insulin dependant diabetes;
4. Patients who lack understanding of the Dutch language;
5. Patients who are treated for or diagnosed with neurological or muscle disorders which make assessment of pain and gait not possible.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Active

Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-03-2013
Enrollment:	90
Type:	Anticipated

Ethics review

Positive opinion	
Date:	30-01-2013
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	NL3638
NTR-old	NTR3826
Other	MCA / CCMO : M012-009 / NL39455.094.12
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Study results

Summary results

N/A