

# Rapid Recovery in patients undergoing total knee arthroplasty, first better than faster!

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Increased patient satisfaction, earlier mobilization with better a pain control.

<b>Ethische beoordeling</b>	Niet van toepassing
<b>Status</b>	Werving gestart
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Observationeel onderzoek, zonder invasieve metingen

## Samenvatting

### ID

NL-OMON21087

### Bron

Nationaal Trial Register

### Aandoening

The purpose of Rapid Recovery is that as soon as possible the patient will start with daily activities.

During the sessions, the physiotherapist will evaluate each stage.

What is the added value compared to Rapid Recovery Joint Care?

The rehabilitation Rapid Recovery has several changes from Joint Care, bringing the total rehabilitation process may be shortened.

- The pain relief protocol is improved. You get more painkillers in tablet form offered both before and after surgery, thus reducing morphine-like analgesics are required. This ensures that you'll have fewer problems with nausea after surgery. In addition, during surgery painkillers injected into the tissues around your 'new knee'. This allows you been able to mobilize sooner after surgery.
- The rehabilitation program has been modified. Instead of a standard rehabilitation program following a personal rehabilitation program.
- If the patient meet the discharge criteria as described the patient may leave the hospital.
  - Independent in and out of bed
  - Independent in and out of a chair
  - Safe walking with tool

- If applicable, walking stairs
- Sufficient knee function

Because the analgesic protocol adapted you will be able to quickly mobilize after surgery. The mobilization schedule is as follows:

- 0-2 hours after surgery: exercises in bed
- 0-6 hours after surgery: mobilizing the bedside under the supervision of a physiotherapist
- within 24 hours after surgery: practice walking, again under the guidance of a physiotherapist

Local Infiltration Anesthesia (LIA), Lokale anesthesie infiltratie, Rapid Recovery, versneld herstel, Joint Care, hospitalization, ziekenhuis opname, total knee arthroplasty, kniegewricht vervangende operatie, rehabaprogram, revalidatieprogramma, early mobilisation, vervroegde mobilisatie.

## Ondersteuning

**Primaire sponsor:** Department of Orthopedic Surgery, Orbis Medisch Centrum, Geleen the Netherlands

**Overige ondersteuning:** Department of Orthopedic Surgery, Orbis Medisch Centrum, Geleen, the Netherlands

## Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

1. Nausea- and Pain score due Visual analog scale (VAS) at scheduled times after surgery until discharge;
2. Date of discharge from hospital.

## Toelichting onderzoek

### Achtergrond van het onderzoek

N/A

### Doel van het onderzoek

Increased patient satisfaction, earlier mobilization with better a pain control.

### Onderzoeksopzet

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10 months after the first operation.

## **Onderzoeksproduct en/of interventie**

Due to the introduction of the Rapid Recovery program in December 2011 all patients who will be operated for a knee Replacement surgery will participate in the Rapid Recovery program or in the Joint Care Program.

The Rapid Recovery Programme has been designed to optimise all aspects of a patient's journey from pre-operative assessment through to and beyond discharge.

Through the programme the average hospital stay is reduced, but every patient is different. The programme promotes a rapid recovery but patients never leave hospital until they are ready.

Patients attend a 'Joint School' at the hospital prior to their admission. They will be invited to bring a relative or friend to act as a 'coach' and support them. Information on all aspects of having a joint replacement are provided. Patients meet all the team members that will be involved in their care from the Pre-Assessment Nurse, to the Surgeon, Physiotherapist and Pharmacist. This really helps to take away the fear and worry that having surgery can bring. Patients are encouraged to take responsibility for their recovery and a pro-active approach is encouraged.

After the operation the programme focuses on getting patients out of bed and starting to move their joint as soon as possible with the support of good pain management. This results in patients making a quicker recovery than average and being able to return to active life as soon as possible.

The goal of Rapid Recovery is to mobilize the patient as soon as possible and Daily activities can resume safely. Patient's will achieve appropriate pain relief medication and individualized rehabilitation program. Reduced hospital stays improve patient satisfaction and aiming for a timely discharge promotes excellent team communication for professionals.

During the implementation we want to observe as much as possible.

All patients operated in the morning will participate in the Rapid Recovery Group (Intervention, n = 50) and all patients operated in the afternoon will rehabilitate in the Joint Care group Control, N= 50).

The split between morning and afternoon is due to the local infiltrate anesthesia applied in Rapid Recovery program so that mobilization can occur earlier. Timeline inclusion will be + / - 8 months.

What is the added value compared to Rapid Recovery Joint Care?

The rehabilitation Rapid Recovery has a number of changes compared to Joint Care, the total rehabilitation process will probably be shortened.

1. The analgesic protocol has been improved. The patient receives more painkillers in tablet form offered both before and after operation, reducing morphine pain killers needed. This ensures that the patient to be affected by less nausea after surgery. In addition, painkillers during surgery injected into the tissues surrounding the 'new knee'. This makes the patient more capable after surgery to mobilize;
2. Instead of standard Rehabilitation following, the patient has a personal rehabilitation program;
3. If the patient meets the discharge criteria, the patient can be discharge from the hospital.

The patient will be discharged to home or to the rehabilitation center if it meets the following discharge criteria:

1. Independent in and out of bed;
2. Independent in and out of a chair;
3. Safe walking with tool;
4. If applicable, walking stairs;
5. Sufficient knee function.

Important for the patient to know that we do not stick to a standard number of days in hospital. Where to patient satisfies all the above points, it is safe to the hospital to leave. During the follow-up appointments (after 6 weeks, 3 months and 1 year after surgery), we

will evaluate how the patient rehabilitation program progresses.

## Contactpersonen

### Publiek

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### Wetenschappelijk

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## Deelname eisen

### Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

100 consecutive patients who are diagnosed with osteoarthritis and will be initiated for total knee arthroplasty (TKA) will be enrolled in this pilot study. All patients will be operated by one surgeon.

### Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

There is no exclusion criteria. Due to the introduction of the Rapid Recovery Program, all consecutive patients who are initiated for a knee replacement surgery, will participate in a Rapid Recovery program or the Joint Care program. All patients who undergo surgery in the morning will participate in the Rapid Recovery group and all patients who undergo surgery in the afternoon will participate in the the Joint Care Group.

## Onderzoeksopzet

### Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Dubbelblind
Controle:	Actieve controle groep

### Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	05-12-2011
Aantal proefpersonen:	100
Type:	Verwachte startdatum

## Ethische beoordeling

Niet van toepassing	
Soort:	Niet van toepassing

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

Register	ID
NTR-new	NL3043
NTR-old	NTR3191
Ander register	METC Orbis : 11N105
ISRCTN	ISRCTN wordt niet meer aangevraagd.

## Resultaten

### Samenvatting resultaten

Fast-track total knee arthroplasty in a patient with Parkinson's disease  
Martijn GM Schotanus (MSc), Bas van Dun (MD), Nanne P Kort (MD, PhD)  
NtvO, September 2014