MORE DATa study

Gepubliceerd: 18-07-2018 Laatst bijgewerkt: 19-03-2025

The existence of a “monocyte left-shift” after (severe) tissue damaga.

Ethische beoordeling	Positief advies
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON24413

Bron
NTR

Verkorte titel
MORE DATa

Aandoening

total hip arthroplasty, knee arthroscopy, immune response, monocyte populations

Ondersteuning

Primaire sponsor: Martini Hospital Groningen

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Expression of early and late markers that identify the maturation stage of monocyte subpopulations.

Toelichting onderzoek

Achtergrond van het onderzoek

Information on the extent of tissue damage after trauma, surgery, disease or therapy is an important paramter in the clinical evaluation of patients and can prevent complications. Unfortunately currently no reliable minimal invasive methods exist to examine such tissue damage. New insights in the kinetics of blood leukocytes after surgical procedures have shown that monitoring of tissue damage can be performed via small amounts of peripheral blood – the monocyte subpopulations change remarkebly in the early phase after surgery. Patients after total hip replacement demonstrated a massive increase of classical monocytes after a notable decrease, 24 hours after surgery. A possible explanation for this phenomenon could be massive recruitment from the bone marrow after large numbers of blood monocytes have migrated into the tissue. This bone marrow recruitment would then resemble the granulocytic left-shift that can be found during or after acute infections. If this hypothesis is correct, a large proportion of the classical monocytes should have a more ‘immature’ phenotype.

This study will evaluate the monocyte phenotype at several time points after a total hip replacement surgery (severe tissue damage) and a knee arthroscopy (minimal tissue damage).

Doel van het onderzoek

The existence of a “monocyte left-shift” after (severe) tissue damaga.

Onderzoeksopzet

5mL of peripheral blood will be drawn preoperatively and postoperatively, with a small margin, at 2 hr, 6 hr, 24 hr, 36 hr, 48 hr and 1 week.

Onderzoeksproduct en/of interventie

5mL of peripheral blood will be drawn preoperatively and postoperatively, with a small margin, at 2 hr, 6 hr, 24 hr, 36 hr, 48 hr and 1 week. After blood samples have been obtained from the patients, the material will be transported at 4^{0}C to the LUMC laboratory site for analysis.

Contactpersonen

Publiek

University Medical Center Groningen (UMCG), Department of Anesthesiology,
P.O. Box 30001
A.J. Vries, de

Hanzeplein 1
Groningen 9700 RB
The Netherlands
+31 (0)50 3616161

Wetenschappelijk

University Medical Center Groningen (UMCG), Department of Anesthesiology,
P.O. Box 30001
A.J. Vries, de
Hanzeplein 1
Groningen 9700 RB
The Netherlands
+31 (0)50 3616161

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- elective knee arthroscopy or an elective total hip arthroplasty (posterolateral approach) for primary osteoarthritis

- between 18 and 70 years of age

- signed informed consent

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- pre-existing immune deficiency

- use of immunosuppressant drugs

- orthopaedic surgery in the last two years

- cognitive impairments

- Evident infectious complications such as pneumonia, surgical site infection (SSI) and/or urinary tract infection (UTI), during postoperative course

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blindering:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-08-2018
Aantal proefpersonen:	12
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	18-07-2018
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 47488
Bron: ToetsingOnline
Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL7207
NTR-old	NTR7406
CCMO	NL60718.099.18
OMON	NL-OMON47488

Resultaten