De rol van de slijmvliezen bij het ontstaan van auto-antistoffen in reumatoïde artritis

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A subset of rheumatoid arthritis (RA) patients harbour antibodies against several post-translational modifications and are frequently positive for rheumatoid factor. The exact pathophysiology of the development of the autoantibody response and of RA...

Ethische beoordeling	Positief advies
Status	Werving tijdelijk gestopt
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON23860

Bron
NTR

Verkorte titel
MUCOSA

Aandoening

Rheumatoid arthritis

Ondersteuning

Primaire sponsor: No direct sponsoring of this trail
Overige ondersteuning: Study clinician is funded by a MD/PhD grant of the directory board of the LUMC, the principal investigator is supported by the Target to B-consortium, directed by topsector Health Holland

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

The main study parameter investigated will be the detection of several RA associated anti-modified protein antibodies (AMPA) and their specific characteristics in feces, saliva and sputum of patients and healthy controls. This will be compared to the autoantibody profile in serum for each subject. Among the distinct antibody features that will be explored are isotype usage, fine-specificity, glycosylation of Fc-and Fab-region, avidity and affinity.

Toelichting onderzoek

Achtergrond van het onderzoek

Rationale: A subset of rheumatoid arthritis (RA) patients harbour antibodies against several post-translational modifications and are frequently positive for rheumatoid factor. The exact pathophysiology of the development of the autoantibody response and of RA remains unknown. Investigations into genetic and environmental risk factors and systemic immune dysregulation have led to the hypothesis that the mucosal surfaces might be involved in the pathogenesis of seropositive RA. It is proposed that tolerance against post-translational modifications is broken at the mucosa, inducing an cascade leading to a systemic inflammatory response and clinical disease.

Objective: We aim to perform an in-depth investigation into the role of the mucosal immune response in the pathogenesis of rheumatoid arthritis. Our objectives are to study the presence of RA-specific autoantibodies and several other biomarkers (cytokines, antigens and microbiome) in mucosal fluids of RA-patients.

Study design: At the rheumatology department of the LUMC a cross-sectional study will be performed in which peripheral blood, feces, saliva and sputum (optional) from patients with rheumatoid arthritis and healthy controls are collected and several clinical (patient) characteristics will be recorded. (Due to the covid-19 pandemic no sputum will be collected at the moment)

Study population: Patients older than 18 years with a definite diagnosis of rheumatoid arthritis according to the ACR/EULAR 2010 criteria, and healthy controls without inflammatory arthritis, are eligible provided that they meet the inclusion criteria and no exclusion criteria.

Main study parameters: The detection of several RA associated antibodies and their distinct antibody features in feces, saliva and sputum of patients. This will be compared to the autoantibody profile in serum. Among the distinct antibody features that will be explored are isotype usage, fine-specificity, glycosylation of Fc- and Fab-region, avidity and affinity.

Nature and extent of the burden and risks associated with participation and benefit: Participant will need to self-collect feces. Saliva is collected by the passive drooling method.

Blood sampling will be performed at the central blood draw facility of the LUMC and a questionnaire will be used to collect clinical parameters. If participants give additional consent for sputum donation, sputum induction will take place using a disposable device, the LungFlute®, through which they have to breath out several times. The risks of this study are limited to the collection of peripheral venous blood and sputum. Any symptoms caused by blood sampling or sputum induction are usually mild and symptoms will recover fully and spontaneously. The participants do not benefit from this study, but their participation could lead to improved future therapeutic care for RA patients.

Doel van het onderzoek

A subset of rheumatoid arthritis (RA) patients harbour antibodies against several post-translational modifications and are frequently positive for rheumatoid factor. The exact pathophysiology of the development of the autoantibody response and of RA remains unknown. Investigations into genetic and environmental risk factors and systemic immune dysregulation have led to the hypothesis that the mucosal surfaces might be involved in the pathogenesis of seropositive RA. It is proposed that tolerance against post-translational modifications is broken at the mucosa, inducing an cascade leading to a systemic inflammatory response and clinical disease. We aim to perform an in-depth investigation into the role of the mucosal immune response in the pathogenesis of rheumatoid arthritis.

Onderzoeksopzet

1 time point

Onderzoeksproduct en/of interventie

Participants will donate blood, saliva, sputum (optional) and feces once and will have to fill out an online questionnaire

Contactpersonen

Publiek

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Veerle Derksen

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Wetenschappelijk

LUMC, department rheumatology
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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- Age 18 years or older
- Ability to understand the patient information form and ability to provide written informed consent
- Written informed consent

For patients:
- a definite diagnosis of rheumatoid arthritis based on the ACR/EULAR 2010 criteria for RA

For healthy controls:
- No previous prolonged and/or current symptoms of inflammatory arthritis

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- Individuals who fail to meet the inclusion criteria
- Individuals for whom relevant safety issues apply (for example, dyspnoea or severe anaemia) that preclude the
provision of sputum, saliva, peripheral blood or feces
- Individuals who are currently suffering from upper airway infections, influenza or other contagious (lung)diseases
- Dental treatment within the previous month
- The presence of oral ulcers
- Individuals with known inflammatory bowel disease

Additional exclusion criteria for sputum donation:
- Eye surgery within the past 6 weeks
- Chest trauma within the past 6 weeks
- Exacerbation of chronic obstructive lung disease

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 tijdelijk gestopt
(Verwachte) startdatum:	01-02-2020
Aantal proefpersonen:	260
Type:	Verwachte startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nee

Ethische beoordeling

Positief advies

Datum:	16-01-2020
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 48311
Bron: ToetsingOnline
Titel:

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL8306
CCMO	NL71319.058.19
OMON	NL-OMON48311

Resultaten