Does endometrial scratching increase the rate of spontaneous conception in couples with unexplained infertility and a good prognosis (Hunault >30%)?

Published: 28-09-2017 Last updated: 19-03-2025

To asses whether endometrial scratching increases live birth rates in couples with unexplained infertility and a good prognosis (Hunault>30%)?

Ethical review Approved WMO **Status** Recruiting

Health condition type Sexual function and fertility disorders

Study type Interventional

Summary

ID

NL-OMON52881

Source

ToetsingOnline

Brief title

SCRaTCH OFO trial

Condition

Sexual function and fertility disorders

Synonym

Infertility / Subfertility

Research involving

Human

Sponsors and support

Primary sponsor: Academisch Medisch Centrum

Source(s) of monetary or material Support: ZonMW Doelmatigheid

Intervention

Keyword: Infertility, SCRaTCH, Spontaneous Pregnancy, Unexplained

Outcome measures

Primary outcome

Cumulative live birth rate (of which the *ongoing* status should be achieved within 12 months).

Secondary outcome

- Live birth rate with ongoing pregnancy within 12 months after randomisation
- Live birth rate 3 months after randomization
- Ongoing pregnancy rate
- Clinical pregnancy rate
- Biochemical pregnancy rate
- Biochemical pregnancy loss rate
- Miscarriage rate
- Multiple pregnancy rate
- Time to pregnancy
- Progression to IUI treatment
- Progression to IVF treatment
- Costs
- Endometrial tissue (including endometrial gene expression analysis, endometrial microbiome analysis)

- Endometrial organoids
- Pregnancy complications
- Complications of endometrial scratching
- Vaginal swabs (vaginal microbiome analysis) (only in UMC Utrecht in women who are randomized for scratch)

Study description

Background summary

In up to 50% of subfertile couples infertility is diagnosed as being *unexplained*. Some of these couples may have an endometrial factor that negatively impacts implantation. It has been suggested that the chances of implantation after IVF are increased by intentionally injuring (*scratching*) the superficial lining of the womb. The inflammatory response will enable the endometrium to acquire a state of optimal receptivity thereby positively affecting live birth rates. Women with unexplained infertility in a strategy of expectant management may also benefit from this scratching procedure.

Study objective

To asses whether endometrial scratching increases live birth rates in couples with unexplained infertility and a good prognosis (Hunault>30%)?

Study design

Randomized controlled non-blinded multi-center superiority trial with 12 months of follow-up. We will include 396 women in each arm (total 792) to identify a meaningful difference between the comparison groups

Intervention

Endometrial scratch during the luteal phase: 6/7 days after the LH-surge. If patients do not want to undergo the scratch during the luteal phase, patients can indicate this and have the procedure scheduled during the follicular phase. The scratch will then be scheduled between cycle day 5 and 11; in case of a mean cycle duration of 25 days or shorter, the scratch is planned on cycle day X (cycle duration minus 15 days) at the latest.

Study burden and risks

Patients who are randomized for endometrial scratching will pay one extra visit to the hospital. From existing literature it is clear that the rate and extent of adverse events is very low. The benefit is a potential increase in the chance to conceive.

Contacts

Public

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Scientific

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Inclusion criteria

- 1. Diagnosis of Unexplained Infertility (UEI) and a Hunault of > 30%.
- 2. Female age 18-38 years
- 3. Primary or secondary infertility lasting at least 1 year
- 4. Regular menstrual cycle
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- 5. Patent tubes (diagnosed by negative Chlamydia antibody titre and absence of risk factors for tubal disease, and/or hysterosalpingography or diagnostic laparoscopy)
- 6. Total motile sperm count > 3 million
- 7. Normal transvaginal ultrasound, defined as no visible intracavitary pathology or intramural myomas with impression of the uterine cavity
- 8. Written informed consent

Exclusion criteria

- 1. History of lower abdominal or pelvic infection
- 2. Previous surgical procedures of the uterine cervix or cavity
- 3. Endometriosis grade 3 and 4
- 4. Previous caesarean section with niche formation
- 5. The presence of untreated unilateral or bilateral hydrosalpinx
- 6. Recurrent miscarriage (defined as 2 or more pregnancy losses prior to 20 weeks of gestation)
- 7. Previous endometrial scratching
- 8. Meno-metrorrhagia (defined as any intermenstrual loss of blood)
- 9. Untreated/unsubstituted endocrine abnormalities (e.g. pituitary, thyroid, adrenal or pancreas

Study design

Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

Primary purpose: Basic science

Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 17-11-2017

Enrollment: 792

Type: Actual

Ethics review

Approved WMO

Date: 28-09-2017

Application type: First submission

Review commission: METC NedMec

Approved WMO

Date: 16-11-2017

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 04-01-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 24-02-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 06-03-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 24-04-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 26-06-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 10-07-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 14-08-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 22-08-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 05-09-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 11-09-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 17-10-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 30-10-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 20-11-2018

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 09-01-2019

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 23-01-2019

Application type: Amendment

Review commission: METC NedMec

Approved WMO

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Date: 24-04-2019

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 22-05-2019

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 11-09-2019

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 11-12-2019

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 08-01-2020

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 15-04-2020

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 01-05-2020

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 16-06-2020

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 15-07-2020

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 08-09-2020

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 12-10-2020

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 27-10-2020

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 08-12-2020

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 04-02-2021

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 15-04-2021

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 18-01-2022

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 21-02-2022

Application type: Amendment

Review commission: METC NedMec

Approved WMO

Date: 28-12-2022

Application type: Amendment

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

ID: 22066

Source: Nationaal Trial Register

Title:

In other registers

Register ID

CCMO NL62675.041.17

Other NTR Kandidaattrial 27811

OMON NL-OMON22066