Does the filling state of the seminal vesicles influence sexual desire?

| Submission date | Recruitment status | Prospectively registered |
|-------------------|---------------------------------|--|
| 03/04/2014 | No longer recruiting | ☐ Protocol |
| Registration date | Overall study status | Statistical analysis plan |
| 09/05/2014 | Completed | Results |
| Last Edited | Condition category | Individual participant data |
| 24/07/2020 | Urological and Genital Diseases | Record updated in last year |

Plain English summary of protocol

Background and study aims

The seminal vesicles are part of the male inner genitals. It is not known if the seminal vesicles have an impact on sexual interest, i.e. if full seminal vesicles increase sexual interest. This would potentially make sense from a biological/behavioural point of view. The aim of this study is to find out if there is any specific brain area that changes its activity in relation to the filling status of the seminal vesicles. The detection of such a specific brain area would suggest that the filling status of the seminal vesicles changes the activity in the brain.

Who can participate?

Heterosexual men between the ages of 20 and 30

What does the study involve?

On day 1 in the morning, participants provide a blood sample for analysis of sex hormone levels, a conventional MRI scan of the pelvis to assess the size of the seminal vesicles, and a functional MRI of the brain. After these examinations, they masturbate in order to empty their seminal vesicles. On day 2 in the morning, they undergo the same examinations.

What are the possible benefits and risks of participating?

The detection of specific brain areas would potentially have a clinical impact in men undergoing radical prostatectomy for prostate cancer, which nowadays is usually performed with removal of both seminal vesicles. If a relationship is found between seminal vesicle filling status, specific brain areas and sexual interest and confirmed by further clinical studies, the standard removal of the seminal vesicles during radical prostatectomy could be re-thought in order to potentially help to preserve sexual interest. There are no risks involved in this study.

Where is the study run from? University Hospital Bern (Switzerland)

When is the study starting and how long is it expected to run for? May 2014 to April 2015

Who is funding the study?
Max and Hedwig Niedermaier Foundation and University Hospital Bern (Switzerland)

Who is the main contact? Dr Frédéric Birkhäuser frederic.birkhaeuser@insel.ch

Contact information

Type(s)

Scientific

Contact name

Dr Frédéric Birkhäuser

Contact details

Freiburgstrasse 4 Bern Switzerland 3010

frederic.birkhaeuser@insel.ch

Additional identifiers

Protocol serial number

N/A

Study information

Scientific Title

Does the filling state of the seminal vesicles influence sexual desire? A pilot study

Study objectives

Filling state of seminal vesicles is an independent factor for the intensity of sexual desire, influencing sexual arousal in healthy men.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Kantonale Ethikkommission Bern (KEK), 05/09/2014, ref: 005/14

Study design

Interventional study

Primary study design

Interventional

Study type(s)

Other

Health condition(s) or problem(s) studied

The physiological role of healthy seminal vesicles on sexual desire

Interventions

The five participants all undergo the same intervention. On day 1 in the morning, they first undergo a blood analysis (5 min), thereafter they undergo a conventional MRI of the pelvis and a functional MRI of the brain (40 min). After these examinations, they masturbate in order to empty their seminal vesicles. On day 2 in the morning, they undergo exactly the same examinations.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

The effect of seminal vesicle filling state on cortical activation and sexual arousal investigated by fMRI, which would be reflected by a reduced activation of specific regions in fMRI of the brain on study after ejaculation.

Key secondary outcome(s))

- 1. Changes in sexual arousal score with full/empty seminal vesicles
- 2. Changes of volume in seminal vesicles during first (before ejaculation) and second (after ejaculation) MRI examination

Completion date

30/04/2015

Eligibility

Key inclusion criteria

- 1. Men between the age of 20 and 30
- 2. Heterosexuality
- 3. Written informed consent
- 4. Ejaculation abstention of 3-5 days before first fMRI examination

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

Male

Key exclusion criteria

- 1. Erectile dysfunction
- 2. Claustrophobia
- 3. Depression
- 4. Status post brain trauma
- 5. Severely reduced visibility
- 6. Medication intake with possible side effects on libido

Date of first enrolment

01/05/2014

Date of final enrolment

30/04/2015

Locations

Countries of recruitment

Switzerland

Study participating centre University Hospital Bern

Bern Switzerland 3010

Sponsor information

Organisation

University Hospital Bern (Switzerland)

ROR

https://ror.org/01q9sj412

Funder(s)

Funder type

Charity

Funder Name

Max and Hedwig Niedermaier Foundation (Switzerland)

Funder Name

University Hospital Bern (Switzerland)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type Details Date created Date added Peer reviewed? Patient-facing?

Participant information sheet
Participant information sheet
11/11/2025 No Yes