ISRCTN23349576 https://doi.org/10.1186/ISRCTN23349576

Trial of treatment of vaginal intraepithelial neoplasia (VAIN)

Submission date
16/12/2015

Recruitment status
No longer recruiting

Registration date
18/01/2016

Overall study status
Completed

Last Edited
01/11/2017

Condition category
Cancer

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[ ] Record updated in last year

Plain English summary of protocol

Background and study aims
Human papilloma virus (HPV) is the name used to refer to a group of viruses that can affect the skin and the moist membranes lining the body, for example the cervix, mouth and throat. Genital HPV can cause abnormal tissue growth (lesions) and other changes to cells within the cervix, vagina and vulva. This can sometimes lead to cervical cancer. These abnormalities can usually be detected with a Pap (cervical) smear. The majority of lesions caused by HPV do not need to be treated, but a prolonged infection over a number of years can lead to precancerous changes and eventually cancer. Lesions in the vagina (vaginal intraepithelial neoplasia, VAIN) are usually treated with laser ablation (removal of the lesion using a laser) or surgical removal of the affected part of the vagina. The disease can be chronic (long lasting) requiring repeated treatment. The treatment can also be difficult due to multifocal lesions (lesions in more than one region of the vagina). A cream containing imiquimod is used to treat genital warts locally. Genital warts are lesions caused by certain HPV types and are benign. Imiquimod is an immunomodulator, which means it stimulates the body's own immune response to the infection. Imiquimod has already been studied in the treatment of other genital lesions caused by HPV. The results have been promising and vaginally administered imiquimod has been relatively well tolerated. This study is looking at different treatment options for vaginal intraepithelial neoplasias (VAIN). The aim of the study is to see how well tolerated and how successful these treatments are.

Who can participate?
Women over 18 that have been diagnosed with VAIN.

What does the study involve?
Participants have an HPV sample taken (with a brush) in addition to routine samples during an outpatient colposcopy visit. They are then randomized into one of two groups. Those in group 1 are treated laser ablation. Those in group 2 are treated with vaginally administered imiquimod. The imiquimod is given as suppositories which are used at home 1-2 times a week for two months (the single dose of imiquimod is 12.5 mg which can be halved if severe side effects occur). The follow-up in the study includes visits at the colposcopy clinic at 2, 4 and 6 months after the initial visit. If persistence or progression of the lesion is detected at the 4-month-visit, the patient is offered either laser ablation or surgery for treatment.

What are the possible benefits and risks of participating?
The frequent follow-ups for the duration of this study can benefit the patients participating. Participation in the study is not likely to cause any harm to the patient even if the treatment method would have to be changed during the course of the study. Due to the short duration of the study no significant delay in treatment will occur. Side effects of imiquimod can be local irritation, lower abdominal pain and flu-like symptoms or fever. These side effects can be treated with non-steroidal anti-inflammatory drugs (NSAIDs).

Where is the study run from?
Helsinki University Hospital, Women's Hospital.

When is the study starting and how long is it expected to run for?
September 2015 to December 2020.

Who is funding the study?
Research Council for Health (Finland)

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
N/A

Study information

Scientific Title
Randomized trial of treatment of vaginal intraepithelial neoplasia (VAIN): laser vaporization and imiquimod

Study objectives
This randomized trial aims to assess the efficacy of treatment of VAIN with traditional laser vaporization or vaginally administered imiquimod. Efficacy will be assessed by histological regression and HPV clearance. We have conducted a pilot trial on this subject (ISRCTN45751386) which found laser and imiquimod treatment to be equally effective in regard to histological regression, but imiquimod was significantly more effective in achieving HPV clearance. This study has power estimations based on the pilot trial.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Helsinki University Hospital Ethical Committee, 26/11/2015, ref: 339/13/03/03/2015

Study design
Single center randomized interventional trial

Primary study design
Interventional

Secondary study design
Randomised parallel trial

Study setting(s)
Hospital

Study type(s)
Treatment

Participant information sheet
Not available in web format, please use contact details to request a participant information sheet

Health condition(s) or problem(s) studied
Vaginal intraepithelial neoplasia (VAIN)

Interventions
Patients enrolled in the study will have an HPV sample taken (with a brush) in addition to the routine samples during an outpatient colposcopy visit. Enrolled patients will be randomized into two groups:

Group 1: treated by laser ablation
Group 2: treated with vaginally administered imiquimod

The imiquimod is given as suppositories which are used at home 1-2 times a week for two months (the single dose of imiquimod is 12.5 mg which can be halved if severe side effects occur). The follow-up in the study includes visits at the colposcopy clinic at 2, 4 and 6 months

after the initial visit. If persistence or progression of the lesion is detected at the 4-month-visit, the patient is offered either laser ablation or surgery for treatment.

Intervention Type
Mixed

Primary outcome measure
1. Histological regression (defined as VAIN 1 or less), assessed from punch biopsies
2. HPV clearance, assessed via HPV genotyping from cervical or vaginal brush samples

Measured at 2, 4 and 6 months

Secondary outcome measures
1. Complete histological regression, assessed from punch biopsies
2. Tolerability of treatment, assessed based on adverse effect reporting on a standardized form from the patients

Measured at 2, 4 and 6 months

Overall study start date
01/09/2015

Completion date
31/12/2020

Eligibility

Key inclusion criteria
1. Over 18 years of age
2. Histological diagnosis of VAIN 2-3
3. Histological diagnosis of VAIN 1, which has been expectantly managed for two years

Participant type(s)
Patient

Age group
Adult

Lower age limit
18 Years

Sex
Female

Target number of participants
Total recruitment target 60 patients.

Key exclusion criteria
1. Pregnancy or lactation
2. Lack of reliable contraception in premenopausal patients

3. Known HIV infection
4. Vaginal cancer

Date of first enrolment
01/01/2016

Date of final enrolment
31/12/2020

Locations

Countries of recruitment
Finland

Study participating centre
Helsinki University Hospital, Women's Hospital
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Sponsor information

Organisation
Helsinki University Hospital, Women's Hospital

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Sponsor type
Hospital/treatment centre

ROR
https://ror.org/02e8hzf44

Funder(s)

Funder type
Research council

Funder Name
Terveyden Tutkimuksen Toimikunta

Alternative Name(s)
Research Council for Health, Forskningsrådet för Hälsa

Funding Body Type
Private sector organisation

Funding Body Subtype
Universities (academic only)

Location
Finland

Results and Publications

Publication and dissemination plan
We intend to publish results of the outcome measures when the trial is completed.

Intention to publish date
31/12/2021

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Available on request