# An investigation into the possible benefits to the reduction of lymph drainage following groin surgery for treatment of vulvar cancer using a new device (PlasmaJet) during surgery

Submission date	Recruitment status	Prospectively registered
11/02/2019	No longer recruiting	☐ Protocol
Registration date	Overall study status	<ul><li>Statistical analysis plan</li></ul>
19/02/2019	Completed	<ul><li>Results</li></ul>
Last Edited	Condition category	☐ Individual participant data
22/02/2019	Surgery	<ul><li>Record updated in last year</li></ul>

#### Plain English summary of protocol

Background and study aims

When lymph nodes are removed from the female groin area as part of treatment for vulval cancer, occasionally collections of fluid (lymph) can occur in the area where the lymph nodes were present. These collections are called lymphocysts. In most cases they eventually get absorbed and resolve by themselves but occasionally they need to be drained repeatedly with needles over a period of few weeks.

Groin lymphocyst formation occurs in aprroximately 10% patients undergoing surgery for vulval cancer and all problems including wound infections, breakdown of wounds occur in nearly 50% of cases. It can cause physical symptoms like pain, swelling around the groin area, leaking of lymph fluid and infections. It is emotionally very distressing for the patient requiring frequent hospital attendances and treatment.

PlasmaJet® is a new device which has been reported to reduce the formation of lymph in surgical wounds and we would like to investigate its usefulness in reducing the chance of groin lymphocyst formation and other complications if it is used in the surgery to remove the lymph glands.

The aim of our study is to assess the potential and safety of using The PlasmaJet technology in the prevention of groin lymphocyst (collection of lymph fluid in the groin) formation by sealing tissues or to burn away thin layers of tissue in patients undergoing BGND for vulval cancer.

### Who can participate?

Women over the age of 18 with a confirmed diagnosis of vulvar cancer and requiring removal of lymph glands on both sides of their groins are eligible to participate

#### What does the study involve?

Each patient will have one side of their groin treated with standard surgery and the other side will be treated using standard surgery followed by the PlasmaJet device.

What are the possible benefits and risks of participating?

The study is exploring if the PlasmaJet device offers any benefit in terms of reduction in the number of complications. The device is known to be safe and there are no known risks from participation.

Where is the study run from?

The Royal Surrey County Hospital NHS Foundation Trust in Guildford, Surrey.

When is the study starting and how long is it expected to run for? August 2013 to August 2016

Who is funding the study?

The study is being supported by "GRACE" charity (https://www.grace-charity.org.uk/)

Who is the main contact?
Dr Thumuluru Kavitha Madhuri
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## Contact information

#### Type(s)

Scientific

#### Contact name

Dr Thumuluru Kavitha Madhuri

#### **ORCID ID**

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#### Contact details

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## Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

**PJBGND** 

## Study information

#### Scientific Title

A prospective, randomised, crossover, feasibility study to evaluate the utility and efficacy of PlasmaJet as a new technology to assist in the management of lymphedema and lymphocyst formation by improving drainage of lymphatic fluid (lymphostasis) and coagulation (haemostasis) in patients undergoing bilateral groin node dissection (BGND) for vulval cancer.

#### Acronym

**PJBGND** 

#### **Study objectives**

To evaluate the ability of PJ to reduce complications in women undergoing groin node dissection for vulvar cancer

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Approved 02/01/2009, Surrey Research Ethics Committee (Royal Surrey County Hospital, GU2 7XX; 0207 1048058, NRESCommittee.SECoast-Surrey@nhs.net), ref: 09/H1109/71

#### Study design

Pilot randomised crossover study

#### Primary study design

Interventional

#### Study type(s)

Treatment

### Health condition(s) or problem(s) studied

Women with vulvar cancer undergoing groin node dissection

#### **Interventions**

The PlasmaJet device is used following groin node dissection on the side randomised to receive it (as per protocol specifications)

#### **Intervention Type**

Device

#### Primary outcome(s)

The feasibility of a crossover (split body) double-blind RCT using an interventional device (PJ) in women undergoing BGND for vulvar cancer surgery. Measured by the number of patients recruited, number of patients declining participation and reason for decline if any exists. Assessed at end of study.

## Key secondary outcome(s))

- 1. The potential and safety of the PJ device in the prevention of groin lymphocyst formation by prophylactic coagulation of lymph vessels in patients undergoing BGND for vulval cancer, recorded daily in patient records
- 2. The side-effect profile post-operatively following surgery with the PJ device. Recorded in the operating notes and post-operatively in the patient records
- 3. Wound infection rates, recorded daily in patient records while in hospital and in the clinic notes following discharge till the wound has healed completely.
- 3. Hospital readmission rates, recorded daily in patient records while in hospital and in the clinic notes following discharge till the wound has healed completely.
- 4. Lymphoedema rates, recorded at every clinic visit for 2 years following last patient recruitment.

#### Completion date

01/07/2017

## Eligibility

#### Key inclusion criteria

- 1. Due to undergo BGND during their treatment pathway for histologically confirmed vulval cancer
- 2. Willing and able to provide informed consent
- 3. Aged 18 years or above
- 4. Willing to allow General Practitioner and other health care professionals, if appropriate, to be notified of participation in the study

### Participant type(s)

**Patient** 

### Healthy volunteers allowed

No

### Age group

Adult

#### Lower age limit

18 years

#### Sex

Female

#### Key exclusion criteria

- 1. Women with vulval cancer who do not undergo BGND
- 2. Previous groin surgery
- 3. Previous radiotherapy to the pelvic area including the groins
- 4. Pregnant, lactating or planning pregnancy during the course of the study
- 5. Not willing to participate

#### Date of first enrolment

01/01/2013

### Date of final enrolment

01/01/2017

## Locations

#### Countries of recruitment

**United Kingdom** 

England

Study participating centre Royal Surrey County Hospital NHS Foundation Trust

Egerton Road Guildford United Kingdom GU2 7XX

## Sponsor information

#### Organisation

Royal Surrey County Hospitals NHS Foundation Trust

#### **ROR**

https://ror.org/050bd8661

## Funder(s)

### Funder type

Charity

#### Funder Name

**GRACE Charity** 

## **Results and Publications**

### Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

### IPD sharing plan summary

## Available on request

## **Study outputs**

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

Participant information sheet 11/11/2025 No Yes