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[Intervention Review]

# Wound drainage following groin dissection for malignant disease in adults

David R Thomson<sup>1</sup>, Hazim Sadideen<sup>2</sup>, Dominic Furniss<sup>3</sup>

<sup>1</sup>Oxford University Clinical Academic Graduate School, University of Oxford, John Radcliffe Hospital, Oxford, UK. <sup>2</sup>Department of Plastic, Reconstructive and Burns Surgery, University Hospitals Birmingham NHS Foundation Trust, Birmingham, UK. <sup>3</sup>Department of Plastic and Reconstructive Surgery, Oxford University Hospitals NHS Trust, Oxford, UK

**Contact address:** Dominic Furniss, Department of Plastic and Reconstructive Surgery, Oxford University Hospitals NHS Trust, John Radcliffe Hospital, West Wing, Oxford, Oxfordshire, OX3 9DU, UK. [dominic.furniss@doctors.org.uk](mailto:dominic.furniss@doctors.org.uk).

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## ABSTRACT

### Background

Groin dissection is commonly performed for the treatment of a variety of cancers, including melanoma, and squamous cell carcinoma of the skin, penis or vulva. It is uncertain whether insertion of a drain reduces complication rates, and, if used, the optimum time for drain removal after surgery is also unknown.

### Objectives

To assess the current level of evidence to determine whether placement of a drain is beneficial after groin dissection in terms of reducing seroma, haematoma, wound dehiscence and wound infection rates, and to determine the optimal type and duration of drainage following groin dissection if it is shown to be beneficial.

### Search methods

In September 2014 we searched the following electronic databases using a pre-designed search strategy: the Cochrane Wounds Group Specialised Register; The Cochrane Central Register of Controlled Trials (CENTRAL) (*The Cochrane Library*). In November 2013 we searched Ovid MEDLINE; Ovid MEDLINE (In-Process & Other Non-Indexed Citations); Ovid EMBASE and EBSCO CINAHL. We did not restrict the search and study selection with respect to language, date of publication or study setting.

### Selection criteria

We considered all randomised controlled trials (RCTs) comparing wound drainage with no wound drainage in individuals undergoing groin dissection, where the most superior node excised was Cloquet's node (the most superior inguinal lymph node). No limits were applied to language of publication or trial location. Two review authors independently determined the eligibility of each trial.

### Data collection and analysis

Two review authors, working independently, screened studies identified from the search; there were no disagreements.

### Main results

We did not identify any RCTs that met the inclusion criteria for the review.

### Authors' conclusions

There is a need for high quality RCTs to guide clinical practice in this under-researched area.

**Wound drainage following groin dissection for malignant disease in adults (Review)**

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## PLAIN LANGUAGE SUMMARY

### The effects of using drainage tubes after surgical removal of lymph glands from the groin

#### What are lymph glands?

Lymph glands are part of the body's immune system and swell or enlarge when the body is fighting an infection. They are located in a number of places in the body, including the neck, armpits, and groin.

#### Why remove lymph glands?

Surgical removal of the lymph glands found in the groin (the inguinal lymph nodes) is an important part of the treatment for several types of cancer, including melanoma and other types of skin cancer, as well as squamous cell cancer of the penis, vulva and the surrounding skin. Sometimes complications, such as wound infection, bruising (haematoma) or a collection of lymph fluid in the area (seroma), can occur after removal of these lymph nodes.

#### Why insert drainage tubes after surgery?

Surgeons can insert plastic drainage tubes into the area from which the lymph nodes have been removed. These tubes are inserted towards the end of the operation, once the lymph glands have been removed. The aim of the drainage tubes is to drain away any fluid or blood that may collect in the wounds and cause complications. The drains are usually left in place until the amount of fluid draining out of them in a 24-hour period has reduced to a certain volume (typically less than 30 mL to 100 mL), although some surgeons will remove the drains at a particular time point after surgery (this can vary from 1 day to more than 1 week). Patients can remain in hospital while the drain is in place, although many surgeons will let patients leave hospital and have the drain managed on an outpatient basis.

However, it is unclear whether placement of a drainage tube reduces, increases or has no effect on complications following this type of surgery. Furthermore the best timing for removal of drainage tubes is unknown.

#### The purpose of this review

The aim of this review was to review all randomised clinical trials (RCTs) that have compared what happens to patients who had a drain inserted after removal of the inguinal lymph nodes with patients who did not have a drain. We also looked for RCTs that examined the effect of removing drains at different times. We searched the medical literature up to September 2014 to gather all the available evidence.

#### What the review discovered

We did not identify any RCTs that compared what happens when you do or do not use drains after surgery for inguinal lymph node removal and therefore we still do not know if drains are beneficial in this context.