Femoral artery access wound study

Submission date	Recruitment status	Prospectively registered
05/11/2007	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
16/11/2007	Completed	Results
Last Edited	Condition category	[] Individual participant data
15/05/2015	Surgery	Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr Jan Swinnen

Contact details

c/o Department of Surgery Westmead Hospital Westmead Sydney Australia 2145

Additional identifiers

Protocol serial number

N/A

Study information

Scientific Title

Femoral artery access wound study

Study objectives

Open access to the femoral vessels is traditionally through a vertical incision. Although this approach gives good surgical access, wound healing can be complicated by sepsis, lymphatic leaks and wound breakdown.

Some causes for wound infections in vascular surgery are well known including emergency surgery, diabetes, having a groin incision and whether an autogenous or prosthetic graft is used. The effect of the type of groin incisions (vertical or transverse/oblique) on wound complications has been debated. There are a limited number of studies, which have looked at actual wound incision in terms of wound infection and lymphatic problems. These studies have been limited by either a short follow up or being a retrospective case analysis. These studies also did not assess the adequacy of the surgical access between the different incisions. We therefore conducted a prospective randomised study to look at the above problems.

Hypothesis:

The horizontal groin incision for femoral artery access has fewer wound complications than the vertical groin incision.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Verbal ethics approval received from:

- 1. South Western Sydney Area Health Service Ethics Committee (Liverpool Hospital), February 2000, ref: 2000/022
- 2. Western Sydney Area Human Research Ethics Committee (Westmead Hospital), March 1999, ref: HREC2000/9/4.19(1090)

Formal ethics approval documents received from:

- 1. Westmead Hospital Ethics Committee (Australia), 12/09/2000
- 2. Liverpool Hospital Ethics Committee (Australia), 16/04/2000

This arrangement was due to the infrequent meetings of the ethics committees.

Study design

Randomised controlled study

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Femoral artery access

Interventions

Treatment arms were:

- 1. Patients with a vertical femoral access incision, or
- 2. Patients with a horizontal femoral access incision

Duration of treatment was the operation duration. Total follow up was 28 days.

The surgical technique used for the transverse incision was as follows: an incision above the groin skin crease when the main vessel to be accessed was the common femoral artery whilst it

was placed below the groin skin crease when the main vessels to be accessed were the profunda femoris or superficial femoral arteries. The deep dissection was the same as that used for vertical incisions.

Please note that recruitment for the two centres were as follows:

- 1. Westmead Hospital started recruiting in May 1999 following verbal approval from the Westmead Hospital Ethics Committee, and finished recruiting in December 2000
- 2. Liverpool Hospital started recruiting in February 2000 following verbal approval from the Liverpool Hospital Ethics Committee, and finished recruiting in December 2000

Intervention Type

Procedure/Surgery

Phase

Not Specified

Primary outcome(s)

Uncomplicated healing

Key secondary outcome(s))

- 1. Wound infection
- 2, Lymphatic leak
- 3. Wound dehiscence

Wounds were examined at 4 days, 10 days and 28 days.

Completion date

31/12/2000

Eligibility

Key inclusion criteria

- 1. Patients over the age of 18 and who could give informed consent
- 2. Consecutive patients undergoing vascular surgery involving femoral artery access

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

- 1. Redo vascular surgery to the femoral artery
- 2. Operating surgeon preference to withhold from trial

Date of first enrolment

01/05/1999

Date of final enrolment

31/12/2000

Locations

Countries of recruitment

Australia

Study participating centre Westmead Hospital

Sydney Australia 2145

Sponsor information

Organisation

Westmead Hospital (Australia) - Department of Surgery

ROR

https://ror.org/04gp5yv64

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

Westmead Hospital and Liverpool Hospital (Australia) - Department of Surgery

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summaryNot provided at time of registration