Impact of a pre-operative mobilisation program using an educational training to improve mobility on mobility, pain, and post-operation length of stay of patients receiving a laparotomy [Auswirkung eines präoperativen Bewegungsschulungsprogrammes auf Mobilität, Schmerzen und postoperativer Verweildauer bei Patienten mit Laparatomie]

Submission date	Recruitment status No longer recruiting	Prospectively registered		
17/07/2009		Protocol		
Registration date	Overall study status	Statistical analysis plan		
29/07/2009	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
30/09/2014	Surgery			

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Prof Eva-Maria Panfil

Contact details

St. Gallen University of Applied Sciences Rosenbergstr. 22 St. Gallen Switzerland CH-9001 +41 (0)71 226 15 25 evamaria.panfil@fhsg.ch

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

Grant no 32.5.1331.0041.0

Study information

Scientific Title

Impact of a pre-operative mobilisation program using the Viv-Arte training model based on kinesthetic mobilisation on mobility, pain, and post-operation length of stay of patients receiving an elective medial laparotomy: a prospective, randomised controlled pilot trial [Auswirkungen eines präoperativen Bewegungsschulungsprogramms nach dem Viv-Arte Lernmodell auf Mobilität, Schmerzen und postoperative Verweildauer bei Patienten mit elektiver medianer Laparotomie: eine prospektive, randomisierte und kontrollierte Pilotstudie]

Study objectives

A pre-operative educational intervention to improve mobility is effective in regard to post-operative mobility, pain and hospital residence time after elective medial incision.

Ethics approval required

Old ethics approval format

Ethics approval(s)

University Ulm (Germany) Ethics Committee, 23/03/2006, ref: 43/06 - UBB/se

Study design

Prospective interventional single-centre randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

Health condition(s) or problem(s) studied

Laparatomy with medial incision

Interventions

Before surgery:

Both groups: general standard preparation by care staff, on the day before operation (shaving and laxative preparation, information on procedures with regard to operation).

Control group: written information with information and motivation for active movement to prevent from thrombosis

Experimental group: educational intervention, including exercise, written and oral information, duration about 30 minutes

After surgery:

Patients of both groups were (a) instructed to execute active movements according to the information sheet and (b) undergo mobilisation exercise without differences.

- (a) + (b) carried out two times a day, while the patient was in intensive care unit
- (a) + (b) carried out once a day, while the patient was in standard care unit.

End of treatment: day of hospital leave, no follow-up after hospital leave.

Secondary scientific contact details:

Dr Michael Brach Institute of Sport Science **University Muenster** Horstmarer Landeweg 62b 48149 Muenster Germany

Email: michael.brach@uni-muenster.de

Jörg Haasenritter MSc Department of General Practice Preventive and Rehabilitative Medicine University Marburg Robert-Koch-Straße 5 (7a) 35032 Marburg Germany

Email: haasenri@staff.uni-marburg.de

Intervention Type

Procedure/Surgery

Phase

Not Applicable

Primary outcome measure

- 1. Functional mobility: a new instrument was designed to observe the amount of assistance needed in 11 functional tasks (MOTPA, mobility test for patients in acute care):
- 1.1. Lying in the bed: moving to the top, moving sideward, transfer from back to lateral position, transfer from lateral lying position to sitting on the edge of the bed
- 1.2. Sitting on the edge of the bed: moving forward, keep sitting position, stand up
- 1.3. Standing position: turning 180°, going backwards three steps, short walk (6 m), walk (30 m), sitting down

The mobility profile was recorded once pre-operative, post-surgical in intensive care unit: daily in the morning and in the afternoon and post-surgical in standard care unit: daily around noon.

- 2. Pain, assessed by Visual Analog Scale (VAS) (0 = no pain, 10 = unbearable pain), before, during, directly after, and 10 minutes after mobilisation and conduction of MOTPA
- 3. Post-surgical hospital residence time; date of medical operation and date of release were documented

Secondary outcome measures

- 1. Socio-demographic data (age, sex, education, profession), recorded pre-operatively
- 2. Mobility-related aids, recorded pre-operatively
- 3. Type of surgery after cystectomy (ileal conduit), recorded once post-surgical
- 4. Number of drainage and access canals, recorded at each mobilisation unit
- 5. Pain medication before (2 hours), during and after (30 minutes) mobilisation, recorded at each mobilisation unit
- 6. VAS pain intensity greater than 30 mm directly before mobilisation exercise results in cancellation of the mobilisation unit, recorded at each mobilisation unit
- 7. Post-operative complications (artificial ventilation for more than 6 hours after operation finish; reintubation; relaparatomy; other complications resulting in restriction of mobilisation, recorded once a day post-surgically). Presence of one of these complications results in exclusion of the patient from the trial.
- 8. Exercise, e.g. thrombosis, lung embolism; disorder of wound cure or suture, which are treated by a ventral bandage), recorded once a day post-surgically

Overall study start date

01/04/2006

Completion date

31/12/2006

Eligibility

Key inclusion criteria

- 1. Cystectomy planned (ICD5-576)
- 2. Age 18 years and above, either sex
- 3. Ability to understand written and spoken German
- 4. Written informed consent

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

30

Key exclusion criteria

- 1. Impaired mobility (functional degree 2 or above, according to Gordon: dependent on personal assistance, supervision or guidance)
- 2. Chronic pain (duration above 3 months, with pharmacological treatment)
- 3. Dementia, medically documented
- 4. Anamnesis includes medial incision

Date of first enrolment

01/04/2006

Date of final enrolment

31/12/2006

Locations

Countries of recruitment

Germany

Switzerland

Study participating centre
St. Gallen University of Applied Sciences
St. Gallen
Switzerland
CH-9001

Sponsor information

Organisation

Hessian Institute of Nursing Research (Hessisches Institut für Pflegeforschung) (Germany)

Sponsor details

Fachhochschule Frankfurt am Main University of Applied Sciences Nibelungenplatz 1 Frankfurt am Main Germany 60318

Sponsor type

Research organisation

Funder(s)

Funder type

Research organisation

Funder Name

Robert-Bosch Foundation (Germany) (ref: 32.5.1331.0041.0)

Funder Name

Hessian Institute of Nursing Research (Hessisches Institut für Pflegeforschung) (Germany)

Funder Name

University Hospital Ulm (Germany)

Funder Name

Institute of Sport Science and Sport - University Bonn (Germany)

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

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?
Results article	results	01/02/2009		Yes	No