# The efficacy of physiotherapy upon shoulder function following axillary dissection in breast cancer: a pilot study

Submission date	Recruitment status	Prospectively registered		
26/02/2007	No longer recruiting	<pre>Protocol</pre>		
Registration date	Overall study status	Statistical analysis plan		
26/02/2007	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
05/09/2007	Cancer			

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

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#### Contact details

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# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

# Study information

#### Scientific Title

# Study objectives

Physiotherapy is effective in patients with mastectomy and Axillary Lymph Node Dissection (ALND), for shoulder/arm mobility and pain primarily and quality of life secondarily.

# Ethics approval required

Old ethics approval format

# Ethics approval(s)

Added as of 05/09/2007: The regional medical ethics board approved the study.

# Study design

Randomised, active controlled, parallel group, single blinded multicentre trial

#### Primary study design

Interventional

# Secondary study design

Randomised controlled trial

#### Study setting(s)

Other

# Study type(s)

Treatment

#### Participant information sheet

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

Breast cancer

#### **Interventions**

Patients assigned to the treatment group started physiotherapy two weeks following surgery in a private practice of their own choice. The research assistant contacted the physiotherapist who had to comply with the treatment regime and supplied him or her with information regarding the project and treatment guidelines. This information consisted of:

- 1. A guideline containing advice and exercises for arm/shoulder, posture correction, coordination exercises, exercises for muscular strength and improvement of the general physical condition
- 2. Exercises to prevent lymph oedema
- 3. Instruction for scar massage if necessary
- 4. A registration form to report the content of the treatment sessions and a three-point scale to indicate whether the amount of treatment sessions was sufficient

The total number of treatments was nine (nine being usually covered by the healthcare insurance), once or twice weekly for the first three weeks, thereafter once a fortnight or less. Patients were asked to perform home exercises on a daily basis for approximately ten minutes a day.

Patients assigned to the control group received a leaflet flyer with advice and exercises for the arm/shoulder for the first weeks following surgery and had no further personal contact with a physiotherapist.

# Intervention Type

Other

#### Phase

**Not Specified** 

#### Primary outcome measure

- 1. Shoulder mobility (flexion [0 180°], abduction [0 180°]), measured by use of a digital inclinometer under standardised conditions
- 2. Pain in the shoulder/arm, measured using the VAS score (zero to ten, zero = no pain, ten = unbearable pain)

# Secondary outcome measures

- 1. Disabilities in daily life, measured by the DASH (Disabilities of the Arm, Shoulder and Hand) questionnaire (zero to 100, zero = no functional problems, 100 = maximal problems)
- 2. Oedema (ml), measured in both arms by means of water displacement, grip strength (Kg) of both hands, measured using the hand-held dynamometer and quality of life, as measured by the SIP (Sickness Impact Profile-short version) questionnaire (zero to 68, zero = good health status, 68 = sever physically disabled)

# Overall study start date

11/08/2003

# Completion date

04/11/2004

# **Eligibility**

## Key inclusion criteria

- 1. 18 years of age and older
- 2. Breast cancer with an ALND
- 3. A Visual Analogue Scale (VAS)-pain score (zero to ten) of one minimally
- 4. Moderate shoulder disabilities in daily life (minimal three points on a five points disability score list)

## Participant type(s)

Patient

#### Age group

Adult

## Lower age limit

18 Years

#### Sex

**Female** 

# Target number of participants

30

# Key exclusion criteria

- 1. Patients with a previous contra-lateral mastectomy
- 2. Patients with insufficient knowledge of the Dutch language to fill in the questionnaires

## Date of first enrolment

11/08/2003

#### Date of final enrolment

04/11/2004

# Locations

## Countries of recruitment

Netherlands

# Study participating centre

University Medical Centre Nijmegen (UMCN)

Nijmegen Netherlands 6500 HB

# Sponsor information

# Organisation

University Medical Centre Nijmegen (UMCN) (The Netherlands)

# Sponsor details

Department of Physiotherapy Nijmegen Netherlands 6500 HB

## Sponsor type

Hospital/treatment centre

#### **ROR**

# Funder(s)

Funder type

Other

Funder Name

Not provided at time of registration

# **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	30/08/2007		Yes	No