

# Has Manual Lymphatic Drainage (MLD), immediately applied after the axillary dissection during 5 months, a preventive effect on the development of arm lymphedema

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1. Patients, receiving MLD and exercises after breast cancer surgery with axillary dissection are less at risk to develop an arm lymphedema, compared with patients receiving only exercises; 2. Patients, receiving MLD and exercises after breast...

|                             |                       |
|-----------------------------|-----------------------|
| <b>Ethische beoordeling</b> | Positief advies       |
| <b>Status</b>               | Werving gestart       |
| <b>Type aanpak</b>          | -                     |
| <b>Onderzoekstype</b>       | Interventie onderzoek |

## Samenvatting

### ID

NL-OMON22079

### Bron

NTR

### Verkorte titel

Study Prevention Armoedema

### Aandoening

Breast cancer, lymphedema, prevention, manual lymphatic drainage  
Borstkanker, lymfoedeem, preventie, manuele lymfedrainage

## Ondersteuning

**Primaire sponsor:** Katholieke Universiteit Leuven

Faculteit Bewegings- en Revalidatiewetenschappen

**Overige ondersteuning:** Institute for the Promotion of Innovation by Science and Technology in Flanders (IWT) - Toegepast Biomedisch onderzoek met een primaire Maatschappelijke finaliteit (TBM)

# Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

Incidence of arm lymphedema: defined by  $> 200$  ml increase of the arm volume compared with the preoperative value.

All patients from the control group and from the experimental group are measured first preoperatively and then 1 month, 3 months, 6 months, 1 year and 2 years after the breast surgery.

## Toelichting onderzoek

### Achtergrond van het onderzoek

Aim: To examine if MLD, applied postoperatively on breast cancer patients, has an influence on the development of lymphedema.

Patients: All patients with an invasive breast cancer are measured preoperatively. The patients with a unilateral axillary dissection are asked to participate in the study. Power analyse has showed that at least 146 patients have to participate.

Method: The patients are randomly allocated to the experimental group, receiving MLD and exercises, or the control group, receiving only exercises. Both groups are treated during 5 months either in our hospital or by a physiotherapist in the periphery. They undergo preoperatively and 1, 3, 6 and 12 months after the breast surgery the following measurements: arm volume and shoulder mobility. The patients fill in the 'LYMF-SBP' questionnaire, to score the functioning problems of the patient. Forty patient volunteers, equally divided between both groups, undergo also a lymphoscintigraphy before the start of the therapy, immediately after and 6 months after the therapy.

### Doel van het onderzoek

1. Patients, receiving MLD and exercises after breast cancer surgery with axillary dissection are less at risk to develop an arm lymphedema, compared with patients receiving only exercises;
2. Patients, receiving MLD and exercises after breast cancer surgery with axillary dissection have less functioning problems, compared with patients receiving only exercises;
3. Patients, receiving MLD and exercises after breast cancer surgery with axillary dissection have more visible axilloaxillary anastomoses after 5 months of therapy and have more visible rerouting of lymphatics from the arm to the trunk, compared with patients receiving only exercises;

4. Patients, receiving standardised MLD performed by a specialist in lymphedema therapy (in our hospital), develop less frequently arm lymphedema, compared with patients receiving MLD performed by a physiotherapist in the periphery.

### **Onderzoeksproduct en/of interventie**

1. In the periphery: not standardised;

2. In our hospital: standardised;

Control group: Exercises.

Experimental group: Exercises + MLD.

Exercises: The patient performs an exercise schema independently at home. The physiotherapist performs mobilisations of the shoulder and verifies if the patient does her exercises well and follows the exercise schema. Duration of 1 session is 30 min, frequency is 1 / week, total amount of sessions is 20.

MLD: MLD method Leduc and method Vodder is applied in a standardised manner. Duration of 1 session is 30 min, frequency is variable between 1 / week and 3 / week, total amount of sessions is 40.

## **Contactpersonen**

### **Publiek**

UZ Leuven  
Dienst Fysische Geneeskunde en Revalidatie  
Herestraat 49  
Nele Devoogdt  
Leuven 3000  
Belgium  
0032 (0) 16 348550

### **Wetenschappelijk**

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## Deelname eisen

### Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Patients who had primary breast surgery with axillary dissection in the University Hospital Leuven (UZ Leuven).

### Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Patients who had breast surgery with sentinel procedure;
2. Patients with bilateral axillary dissection;
3. Patients not measured preoperatively;
4. Patients who refuse to participate in the study.

## Onderzoeksopzet

### Opzet

|                  |                       |
|------------------|-----------------------|
| Type:            | Interventie onderzoek |
| Onderzoeksmodel: | Parallel              |
| Blindering:      | Enkelblind            |
| Controle:        | Geneesmiddel          |

### Deelname

|                         |                      |
|-------------------------|----------------------|
| Nederland               |                      |
| Status:                 | Werving gestart      |
| (Verwachte) startdatum: | 01-10-2007           |
| Aantal proefpersonen:   | 160                  |
| Type:                   | Verwachte startdatum |

## Ethische beoordeling

Positief advies

Datum: 13-09-2007

Soort: Eerste indiening

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

### In overige registers

| Register       | ID                                 |
|----------------|------------------------------------|
| NTR-new        | NL1023                             |
| NTR-old        | NTR1055                            |
| Ander register | : IWT 060519                       |
| ISRCTN         | ISRCTN wordt niet meer aangevraagd |

## Resultaten

### Samenvatting resultaten

No