# THE EFFECT OF DR. VODDER'S MANUAL LYMPH DRAINAGE FOR BREAST CANCER –RELATED LYMPHEDEMA

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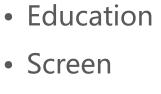
# **OUR HOSPITAL AND DEPARTMENT**

- Peking Union Medical College Hospital Best hospital in China
- Founded in 1921 by Rockefeller
  Foundation
- Department of Physical Medicine and Rehabilitation, founded in 1932
- Ten years of experience in medical care for lymphedema



#### MDT

Breast surgery and Gynaecology



PM&R

• CDT

• Evaluation

Plastic surgery



• Operation

- Phsiotrist
- Phsiothrepist
- Breast surgeon
- Plastic surgeon
  - Gynecologist
  - Nutritionist
  - Radiologist

# **OUR WORK**

- 400 cases per year
- Lymphedema database
- Dr. Vodder' s MLD courses
- Continuing education project
- Academic salon
- 2019 lymphedema summit





### MLD

#### Advantages

- Quite welcomed
- Well tolerated
- Harmless

#### Disadvantages

- Time consuming
- Skill requiring
- Insufficient evidence



To observe the immediate effect of Dr. Vodder's MLD alone on BCRL and the effect on different stages of lymphedema

### **MATERIALS AND METHODS**

Inclusion criteria

Mastectomy history

Swelling or feeling of heaviness

Diagnosed as stage 1-2

Have signed informed consent

#### **Exclusion** Cancer metastases criteria or recurrence Acute cellulitis Thrombophlebitis or DVT Lymphatic tumor spread Manifest congestive heart failure

Shortness of breath

# DEMOGRAPHY

- 30 patients
- Female
- 18 patients in stage 1
- 12 patients in stage 2
- Age 51 years old (27–75)
- BMI 23.6 (18.3-28.2)
- Duration one month to seven years

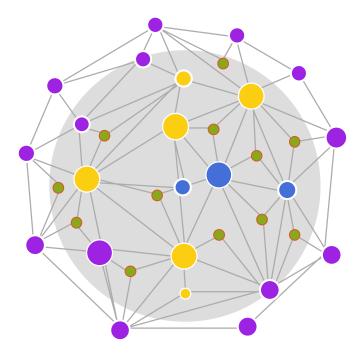


### **SCORING**

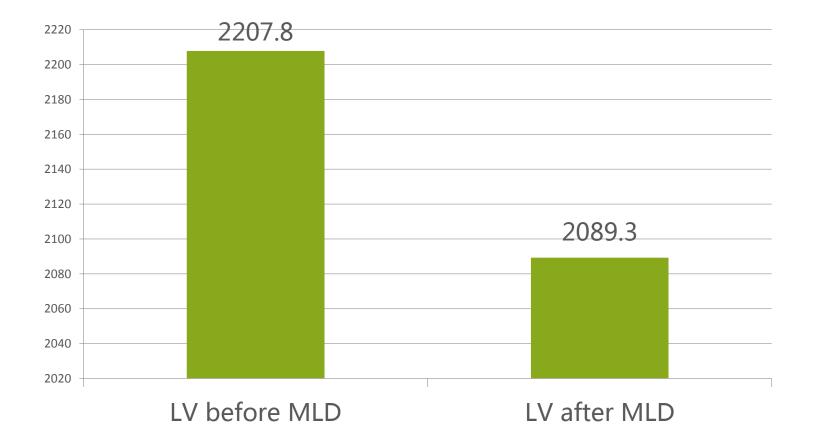
LV and LTW baseline	MLD 45min	LV and LTW
	Limb Volume, LV	LTW
Measurement tools	Circumferential measurements	Moisture Meter-D
Site	Every 4 cm from the styloid process to the shoulder	Ventral and dorsal midpoint of 10cm above and below elbow
Comparision	Before and after MLD between stage 1 and 2	Before and after MLD between stage 1 and 2

# **STATISTICAL ANALYSIS**

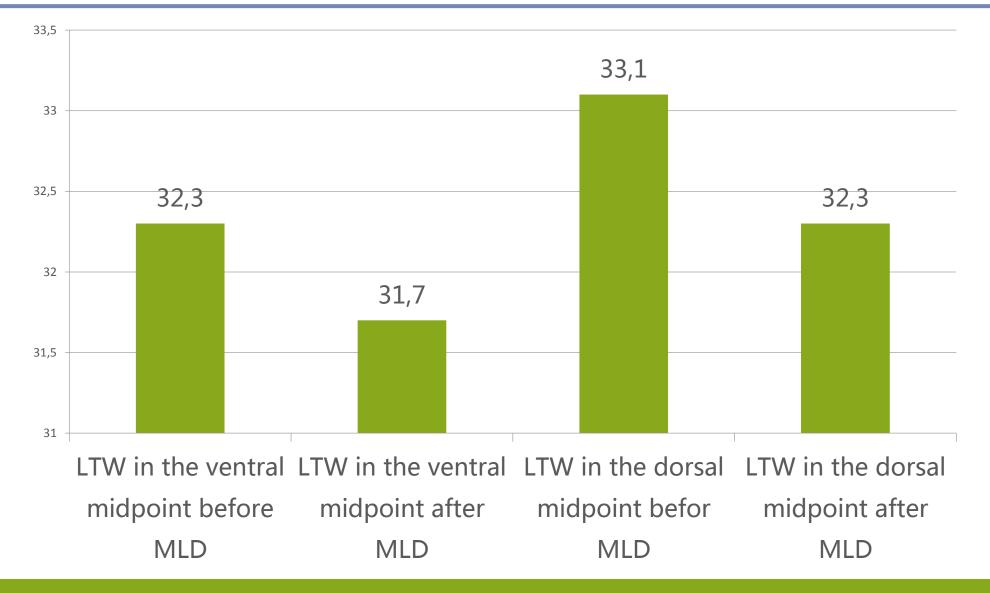
- Matched t test
- Independent sample t test
- P<0.05



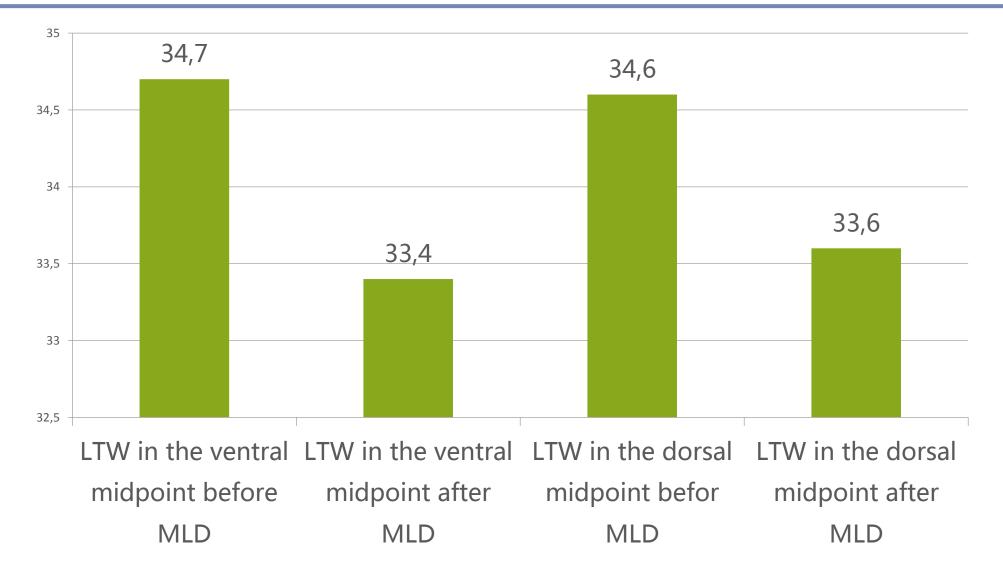
## LV COMPARISON (MEAN, ML)



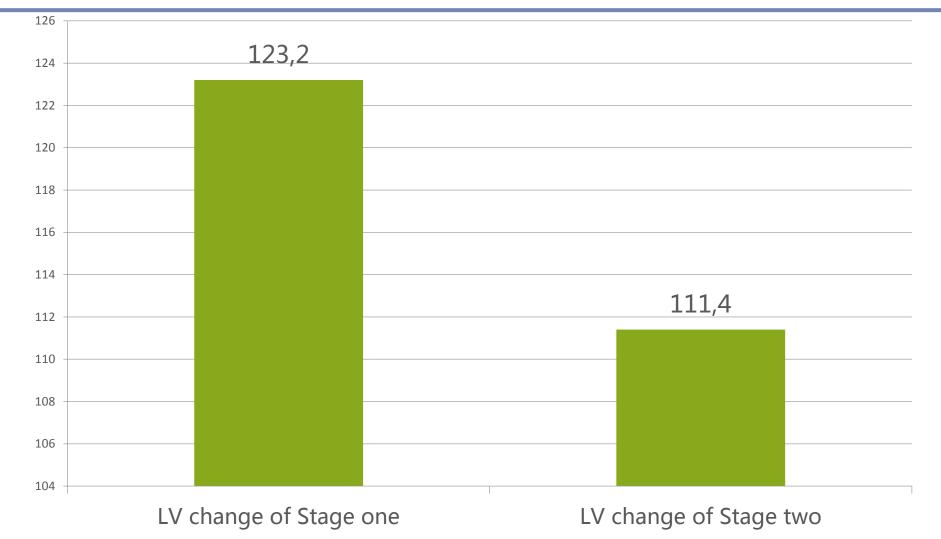
### **LTW COMPARISON-UPPER ARM**



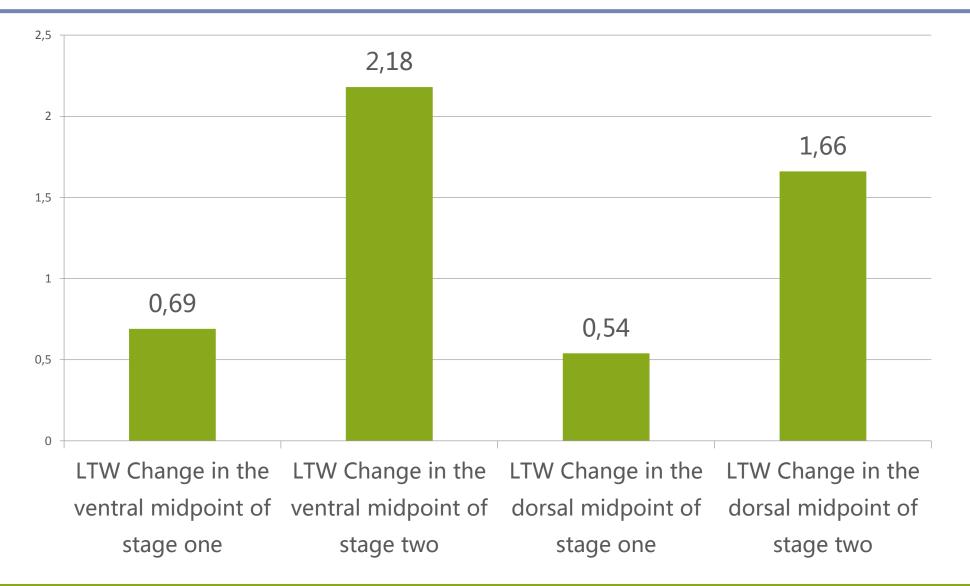
### **LTW COMPARISON-FOREARM**



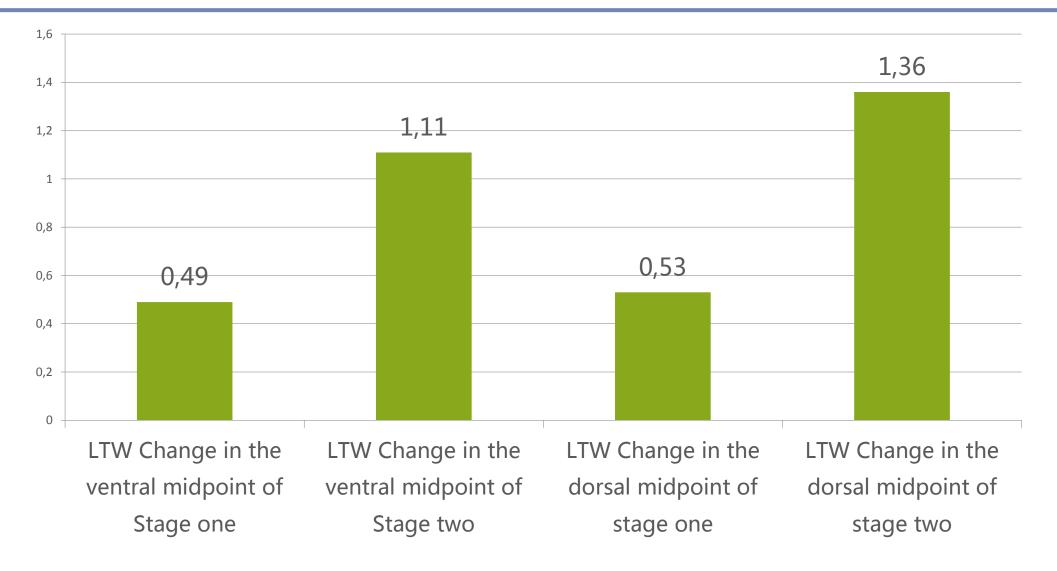
# **COMPARISON OF LV CHANGE (ML)**



# **COMPARISON OF LTW CHANGE-FOREARM**



# **COMPARISON OF LTW CHANGE-UPPER ARM**



- CONCLUSIONS
- Dr. Vodder's MLD can immediately reduce the volume and the LTW of the affected limb with BCRL
- The improvement of the LTW in stage two was more significant than in stage one
- With a limited number and time-availability of certified Dr.
  Vodder' s MLD professionals, stage two patients may be given preference for MLD to acquire high cost-benefit ratio





#### THANK YOU

#### WELCOME TO BEIJING

