

**'Space is the breath of Art.'**

Frank Lloyd Wright (1910)

**'A nation that destroys its soils destroys itself.  
Forests are the lungs of our land,  
purifying the air and giving fresh strength..'**

Franklin D. Roosevelt (1930)



## 20. PULMONES

## 20.12. THERAPY PULMONES

### 20.12.1. Inspiration- or expiration dysfunction

- dysfunction in inspiration = exo-dysfunction.
- dysfunction in expiration = endo-dysfunction.

#### Lobus superior

Patient: supine.

Osteopath: sits at the head end: one hand posterior and the other hand anterior (perpendicular to the 'axis of rotation') at the level of lobus superior.

Implementation: the osteopath follows the preferred rotation and slows down the opposite rotation, until a Point of Balanced Tension (PBT) is reached in the dysfunctional direction.

Normalization: Afterwards, the patient makes an inspiratory or expiratory apnea. Hold until the lobus wants to rotate back in the normalizing direction.  
 This technique is followed by a direct mobilizing technique during a few deeper breathing cycles.

#### Lobus medius

Same as the previous one with the exception of the positions of the hands:

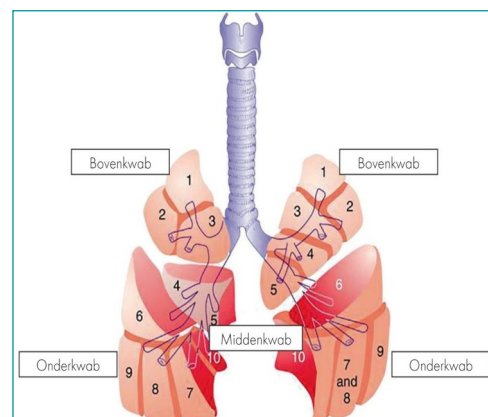
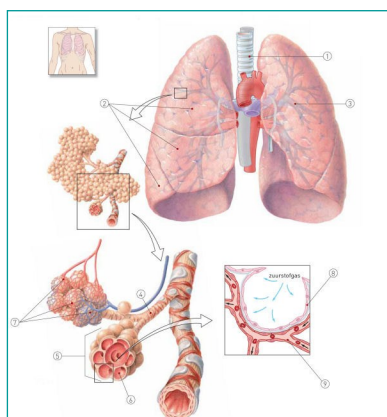
- The anterior hand lies perpendicular to the 'axis of rotation' of the lobus medius.
- The posterior hand has the same height / level dorsal.

#### Lobus inferior

Same as previous with the exception of:

- The osteopath is homolateral.
- anterior hand lies perpendicular to the 'axis of rotation' of the inferior lobus.
- posterior hand same height dorsal.

*Direct-Indirect Technique*



## 20.12.2. Normalization pendulum movement

### Standard normalization Pendulum Movement

Patient: sits on the treatment table.

Osteopath: stands posterior with the hetero-lateral foot on the table. The patient places his hetero-lateral arm on the osteopath's thigh.

Implementation: the osteopath places the hetero-lateral hand on the patient's head and the homolateral hand with the radial side of the index finger at the level of the internal edge of Costa-I.

Normalization: during expiration, the osteopath guides the movement to inferior and during inspiration the movement is slowed down. Repeat until no more profit is made. At the end, the osteopath makes a recoil during a deep inhalation.



### Variant normalization Pendulum movement

Patient: supine.

Osteopath: sits at the head end, the patient's head, who lies with the head over the edge of the table, supported by the osteopath. The index finger of the other hand at the level of the internal edge of Costa-I.

Implementation: the osteopath places the patient's C-Spine in a posterior translation and a hetero-lateral lateroflexion, and possibly also in combination with a hetero-lateral rotation or with a homolateral rotation (depending on the movement restrictions that are observed).

Normalization: with the index finger, the osteopath inhibits movement at inspiration and accompanies movement at expiration. When no more gains are made, the osteopath can make a recoil during inhalation.



*Direct-Indirect Technique*



### 20.12.3. Recessus Costo-mediastinalis anterior

Patient: supine.

Osteopath: stands at the head of the bed with the hands crossed. One hand on the Sternum (fingertips to caudal), the other hand at the level of Costa-II-IV (fingertips to lateral).

Implementation: during increased breathing, the osteopath gives a pressure with the hand at the level of the Costae to posterior and laterally, with the hand at the level of the Sternum to posterior

Normalization: repeat this technique several times and at the end of the recoil during deep inhalation. If necessary, a bilateral technique can be performed.



### 20.12.4. Recessus Costo-diaphragmaticus

Patient: sitting on the treatment table.

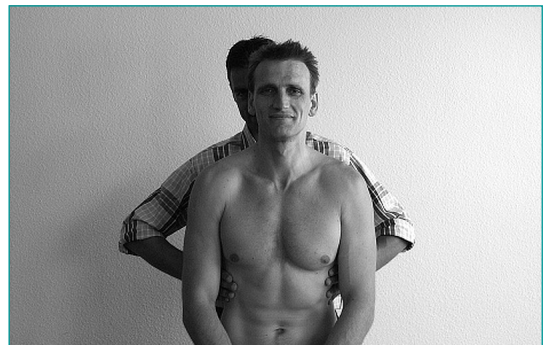
Osteopath: stands posterior with homolateral foot on the table. The patient places the homolateral arm on the osteopath's thigh.

Implementation: the osteopath places one hand at the level of the lower Costae and the other hand on the patient's head.

Normalization: The osteopath puts the patient's head into a hetero-lateral lateroflexion and rotation and fixes the recessus while the patient inhales and exhales deeply.

~ repeating several times

~ at end recoil during deep inhalation.



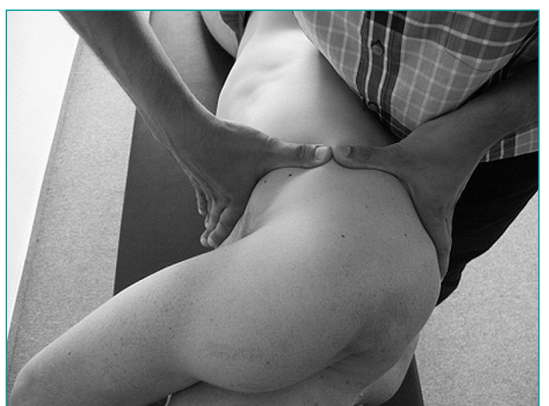
### 20.12.5. Technique with fixation fissura

Patient: in the side-lying position.

Osteopath: stands on the posterior side.

Implementation: both thumbs together lateral side thorax, with index finger one hand posterior on the fissure obliquus (direction T<sub>3</sub>) and index finger other hand anterior on the fissure obliquus (direction Art. Chondro-sternalis-VI) or on the fissura horizontalis (in the direction of Art. Chondro-sternalis-IV).

Normalization: the osteopath fixes the fissure while the patient inhales and exhales deeply. Repeat technique several times – at the end of the recoil during deep inhalation.



*Direct Techniques*

### 20.12.6. Mobilization Fissurae

Patient: in prone position or supine.

Osteopath: stands hetero-laterally and places one hand cranial of the fissura, the other hand caudal of the fissura.

Normalization: mobilize one lobus in relation to the other.

**Nota Bene:** it is an active and direct mobilization.



**Direct  
Techniques**



### 20.12.7. Pulmonary tissue techniques

#### Rigidity (loss of elasticity)

Patient: in prone or supine position.

Osteopath: stands laterally or at the head end.

Normalization: slowly penetrating to lung tissue level, with both hands positioned on each other and the osteopath performs rhythmic compression.

#### Hypertension (loss of mobility)

The cause of increased tension will usually lie in other organs or cavities, and must therefore (mostly) be treated there first.

A direct mobilization technique can then be carried out.

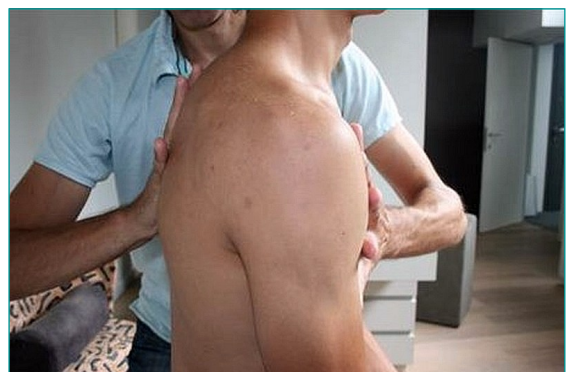
#### Hypotension (increased mobility)

Patient: supine.

Osteopath: stands laterally or at the head end and places one hand anterior on a certain lobus, the other hand posterior on the same height,

Implementation: the osteopath performs a compression to opening (tension build-up).

This technique can also be performed in a sitting position.



#### **Remark:**

*In this case, the concepts of rigidity, hypotension and hypertension refer to the mobility between the Pleura visceralis and the Pleura parietalis.*

### 20.12.8. Stimulation of Pleuro-pulmonary mobility

The pleuro-pulmonary stimulation techniques are implemented following normalizations of the peripheral structures (fissure, reccessi, pulmonary top, possibly also after treatment of Costae, Sternum, Spine and myofascial structures at the level of the Thorax).

#### Lobus superior

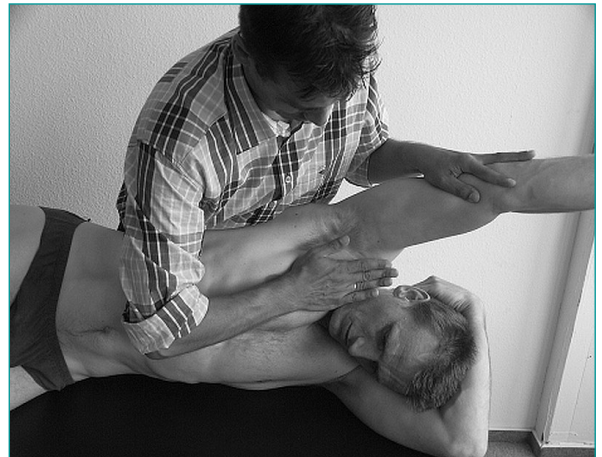
Patient: in a side-lying position with elevation of the arm (underlying arm under the head).

Osteopath: stands posterior, caudal hand anterior on the Costae at the level of lobus superior, cranial hand at the level of the elbow.

Implementation: the osteopath brings the patient's arm to the level of the region to be treated. The patient makes a deep inhalation while pressing their arm to the anterior against resistance of the osteopath.

Normalization: the osteopath guides the Costae to antero-superior with vibrations, followed by relaxation and exhalation, while osteopath follows the costal movement.

#### Indirect Techniques



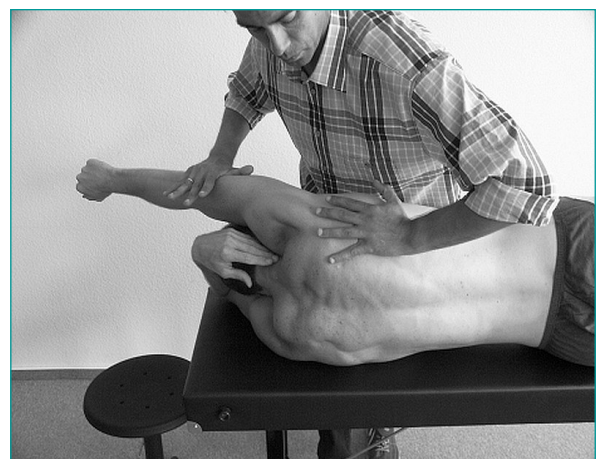
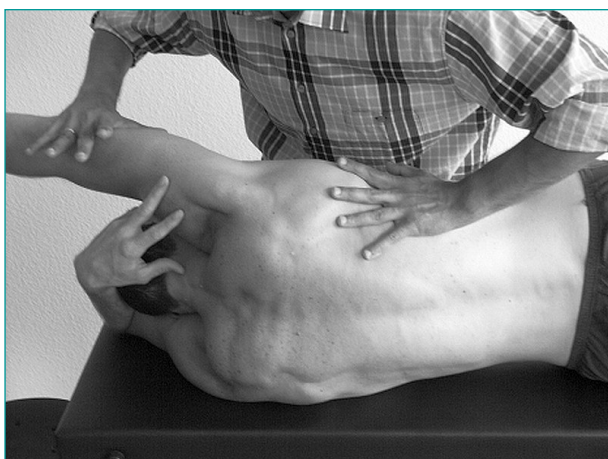
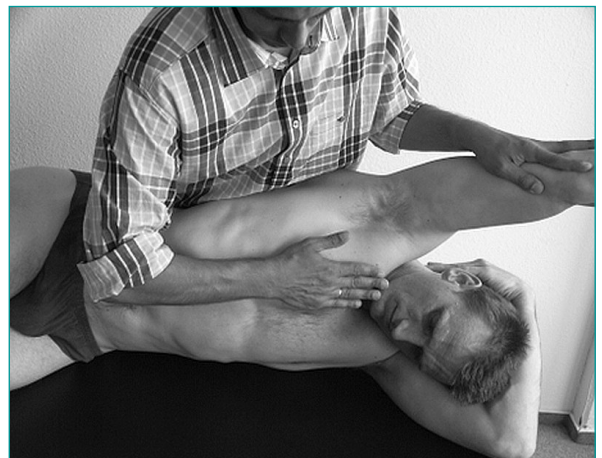
#### Lobus Medius

Same as the previous one with the exception of the contact on the Costae: anterior at the level of lobus medius.

#### Lobus inferior

Same as the previous one with the exception of:

- Position of osteopath: stands anterior.
- contact on the Costae: postero-lateral at the level of lobus inferior.
- Isometric contraction: towards lateral.



### 20.12.9. Lung Pump Techniques

**Indirect Techniques**

The lung pump techniques are performed following normalizations of the lung tissue itself (rotational dysfunctions, rigidity and tension dysfunctions) or to support lung diseases.

#### Lobus superior

Patient: supine.

Osteopath: stands at the head end of the patient.

Implementation: the osteopath places the internal hand on the Costae at the level of lobus superior, the external hand brings the patient's arm into abduction until traction is created at the level to be treated.

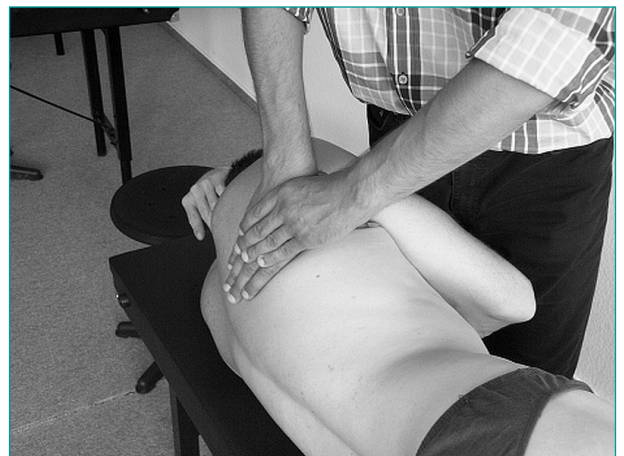
Normalization: the osteopath guides the Thorax to maximum expiration and slows down the inspiration movement.

Repeat technique several times, followed by recoil during inspiration.



#### Lobus medius

Same as Lobus Superior with the exception of contact on the Costae: at the level of lobus medius



#### Lobus inferior

Same as lobus superior with the exception of:

- Patient position: in side-lying position; lower arm under head, upper arm for torso.
- Position of the osteopath: stands ventrally and places both hands on top of each other postero-lateral at the level of lobus inferior.

