Pressotherapy with adjustable high pressure gradient

Pressothérapie à gradient de pression élevé réglable

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Compliance of Compression Stockings and other Technologic Innovations
RESULTS WITH MERCURIAL PRESSOTHERAPY

**Infected secondary lymphoedema (10 years old)**

Before treatment | After treatment
---|---

**Radio surgical lymphoedema (7 years old)**

Before treatment | After treatment
---|---

**Bilateral secondary lymphoedema (uterus cancer)**

Before | After | 1 year
---|---|---

**Rebellous ulcer**

1st session | 4th session
Isotopic lymphoscintigraphy study (Pr. H. Boccalon, Toulouse U.H.C., 1992)

30 primary and secondary lymphoedema (lower limbs)
(760 mm Hg = 1 bar maximum pressure on the extremities)

- 13 improvements of the lymphatic flow,
- 16 unchanged states
- only 1 aggravation on cancer recurrence, with clinical improvement

30 years experience of Mercurial Pressotherapy:
> 2M patients treated: no induced deterioration for usual results

Strong pressure gradients can be safely applied to pathological limbs.
COMPRESSION MODES

**continuous compression**
- 10 to 40 mm Hg (0.01 to 0.04 bar)

**intermittent compression**
- low pressure gradients < 200 mm Hg (0.2 bar)

**discontinuous gradual paroxysmal compression**
- high pressure gradients 200 to 760 mm Hg (0.2 to 1 bar)
• Loosening of **tissular contraints**

• Felt at a deep tissue level (rarer lymphatic vessels, aggravating spiral)

• Tightening effect on the **arterial endothelium**

—> **Volume decreases**

—> Secondary reactive **hyperemia**

—> Quick return to a **muscle aerobiosis** state *(INSEP 1990)*

- Specifics **numerous air chambers**
- Gradient smoothing method
- Control module programs **variable high pressure gradients**

- Patient has to be relaxed, lying down with trunk inclined.
- Maximum peripheral pressures can be moved higher on the limb.
- In pure lymphatic pathologies, the device dispenses **proximal ganglionic pressures**.
- **Stockings** are widely used around treatments.
Set of **gradual paroxysmal pressures**

- **Initial treatment:**
  3 to 4 sessions of 30 min.
  1 to 8 days apart

- **Maintenance treatment:**
  1 session at 1 month,
  3 months,
  every 6 months or once a year
  and when judged necessary, according to the evolution

*Doppler examination classifies pathologies & protocols of sessions.*
Differences with existing pressotherapy:
• range of macro pressure gradients (0,2 to 1 bar)
• action delivered in depth
• conjunction « evacuations/vasodilatations »
• induced aerobiosis

Compared with Mercurial Pressotherapy:
• absence of environmental stress
• treatment position at rest
• small bulk of the device, its mobility, its lightness, its cost

3 possible uses of the proposed pressure gradients:
• medical & paramedical fields
• sport fields, fitness, spas
• well-being and aesthetics
• venous and veno-lymphatic pathologies
  (sequelae of thrombosis, pain, heaviness, edema, hypodermitis, ulcers)

• sequelae of traumas
  (sprains, fractures, tears, algoneurodystrophy)

• sport pathologies & traumas

• primary and secondary lymphoedemas, early and old stages
  prevention of late edemas

• mixed pathologies

• arterial surgery contraindicated for the elderly
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Shall you have any further questions, please find our contacts at:

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