



The 70° General Assembly and Internacional Scientific Congress of the World Federation of Hydrotherapy and Climathotherapy

«THERMAL CLUSTERS»

THERMAL MEDICINE and AESTHETIC MEDICINE INTERACTIONS and SYNERGIES

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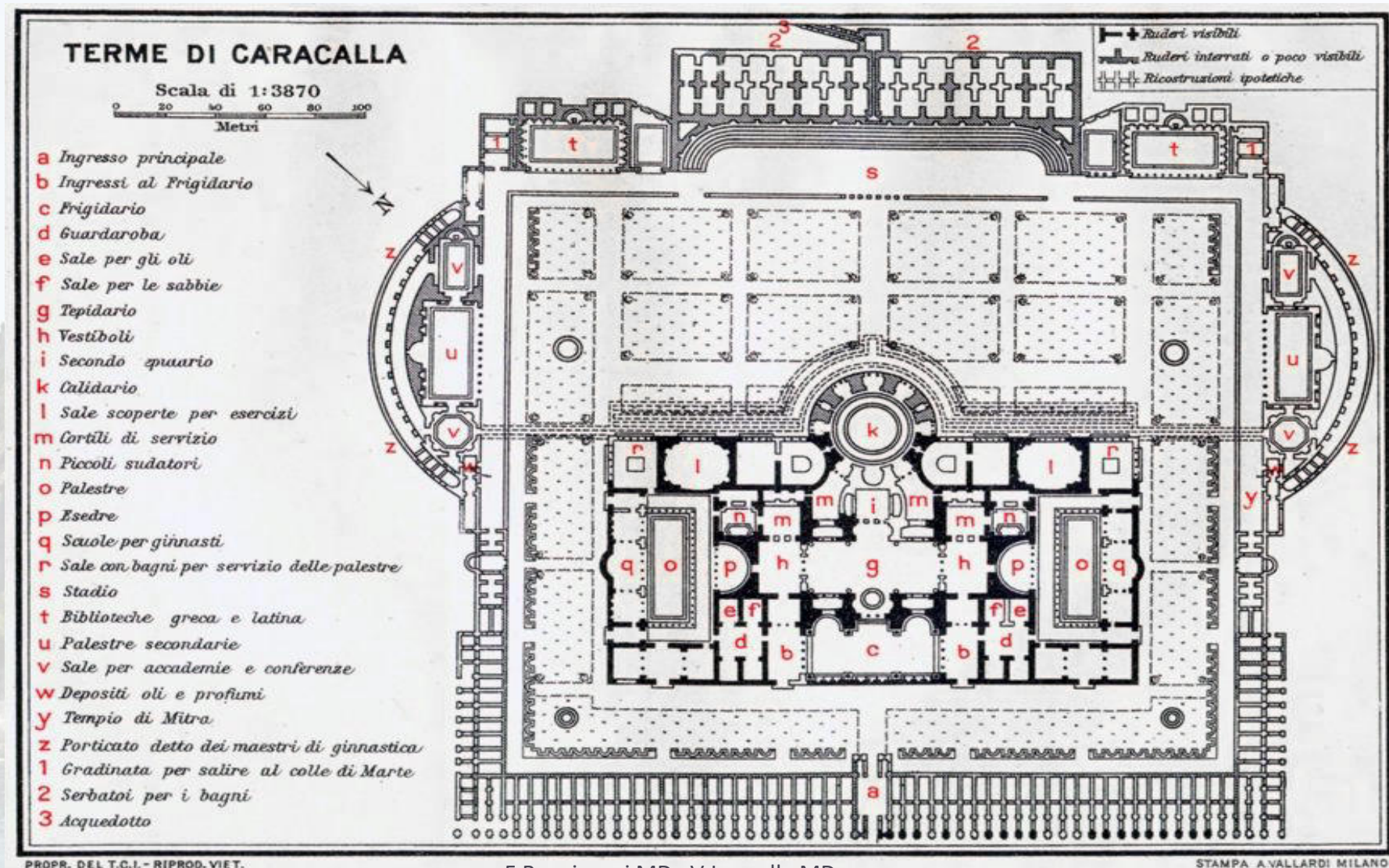
Thermae : the role and function in Roman society

- ▶ Thermae were not a luxury for Roman Citizen
- ▶ Thermae were a meeting place and socialization
- ▶ Thermae were a place of culture
- ▶ Thermae educated in the discipline of hygiene , body care and aesthetcs
- ▶ Thermae were one of the foundations of civilization.
- ▶ Thermae has estended the Rome character and civilization throughout Europe, Africa and Asia

Thermae, body care and aesthetics

- the Roman baths were frequented not only for therapeutic purposes but mainly for personal hygiene, wellness and beauty.
- In the Thermae there were areas dedicated to exercise and specially in the part reserved for women also rooms for aesthetics.
- Thermae has always been a privileged location for aesthetic care

Caracalla Thermae : the plant



terme medicina estetica

X



TUTTI

MAPS

IMMAGINI

NOTIZIE

VIDEO

SHOPPING

LIBRI

VOLI

STRUMENTI DI RICERCA

Medicina estetica - Fonteverde - Resort, terme & Spa in Toscana - San Casciano dei Bagniwww.fonteverdespa.com - [terme-e-salute](#)

Le migliori tecniche non invasive, praticate da personale medico specializzato, per correggere o eliminare gli inestetismi del viso e del corpo, ...

Medicina Estetica Viso – Terme di Montepulcianowww.termedimontepulciano.it - [service](#)

Distendere le rughe, ridisegnare il contorno delle labbra, migliorare gli inestetismi del volto, modellare la linea del corpo e del viso. Questi sono alcuni dei più frequenti sogni delle donne; oggi, grazie ai progressi ...

Medicina Estetica - Terme di Saturnia - Toscanawww.termedisaturnia.it - [SPA](#)

Il trattamento con botulino è un intervento di medicina estetica che permette mediante piccole iniezioni in punti specifici dei muscoli del viso, di bloccarne o ridurne la contrazione distendendo la muscolatura ed a ...

Medicina Estetica - Terme di Chiancianowww.termechianciano.it - [rif0000002](#) - [M...](#)

Nel reparto di medicina estetica e termale i prodotti più innovativi e i trattamenti all'avanguardia insieme alle acque, sono al servizio della bellezza del viso e del corpo grazie alla professionalità di medici specialisti in ...

Terme di Riolo - Centro di Medicina Esteticawww.termediriolo.it - [terme-di-riolo](#) - [ca...](#)

La ricerca in campo estetico delle Terme di Riolo si fonda su un principio antico ma di estrema attualità: la vera bellezza si esprime pienamente in una condizione di equilibrio psicofisico che si raggiunge per mezzo ...

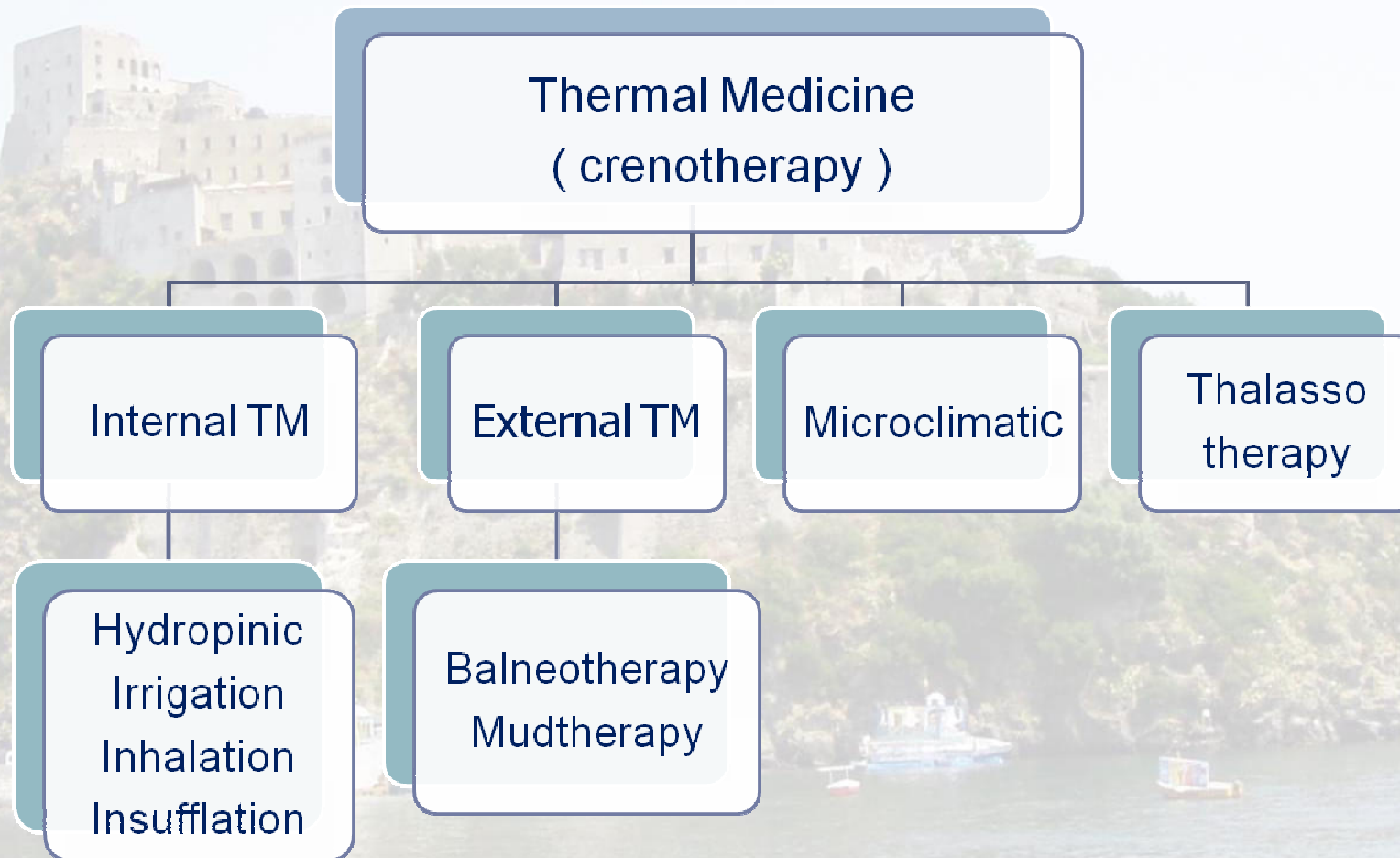
DERMATOLOGIA E MEDICINA ESTETICA - Terme dei Papiwww.termedeipapi.it - [dermatologia-e-m...](#)

10 lug 2015 - MEDICINA ESTETICA. PROGRAMMA LINFODREN -Visita Medico Estetica -4 sedute di Carbossiterapia -4 sedute di Linfodrenaggio -2 sedute di Fangoterapia €364 consigliamo la preventiva ...

Aesthetic Medicine in Thermal center

- ▶ Even today, many Thermal centers offer treatments of Aesthetic Medicine
- ▶ Almost always **lacking a true integration**
- ▶ Aesthetic Medicine in Thermae does not mean the simple transfer of some specific medical practices in Thermal centers
- ▶ Aesthetic Medicine in Thermae means a real integration of the two disciplines
- ▶ **Complementary and synergic actions**

Thermal Medicine : Methods



Thermal Medicine : Methods in Aesthetic Medicine

BALNEOTHERAPY

- ✓ In single hydrotherapeutic bath
- ✓ Whit elements
- ✓ In pools
- ✓ Water passage
- ✓ showers

MUD THERAPY

- ✓ Thin layer
- ✓ In single hydrotheraic bath

MICROCLIMATIC THERAPY

- ✓ Hot natural or artificial caves

THALASSOTHERAPY

Balneotherapy in Aesthetic Medicine

single therapeutic bath



Rain shower



Balneotherapy in Aesthetic Medicine

H.B. with underwater shower



Pool



Mudtherapy in Aesthetic Medicine

Face-mud



Body-mud



Thermal treatments : the actions in Aesthetic Medicine

Micro and macrocirculation

Osmotic action

Direct action of the water-mud-stim mineral components

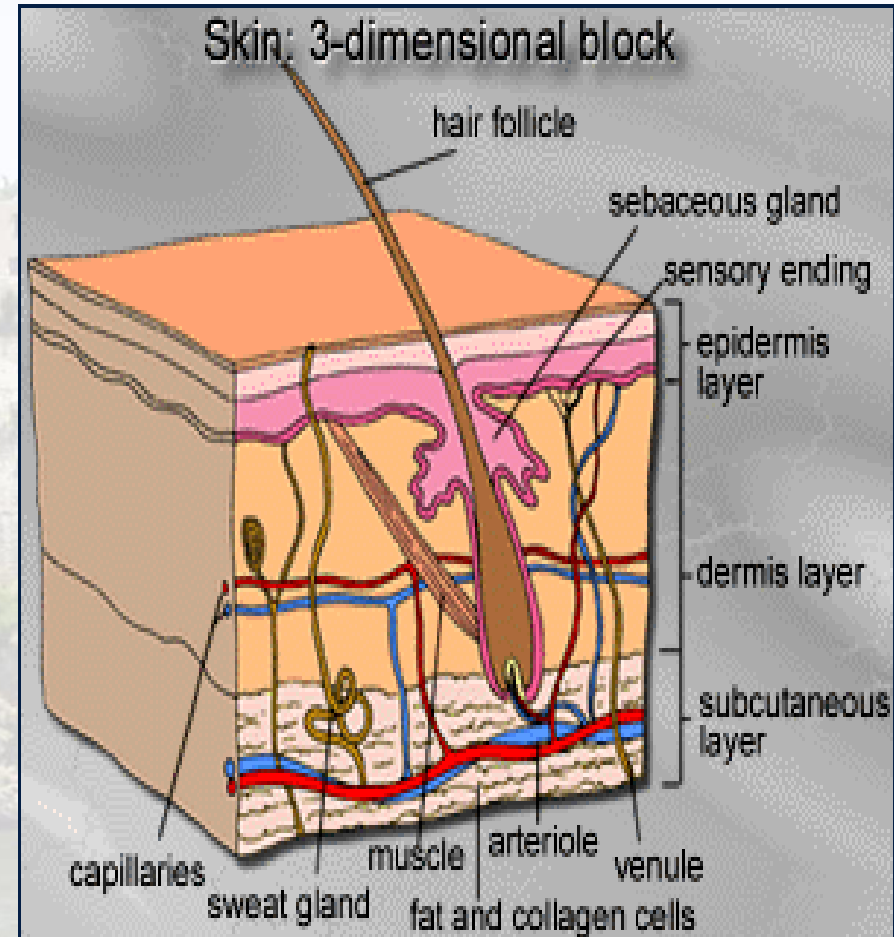
Interference on functional districts

Direct and indirect neuroendocrine stimulation

Immunological stimulation

Thermal treatments : the action on the skin

- ▶ Antiphlogistic
- ▶ Anti seborrhoea
- ▶ Disinfectant
- ▶ Anti-edema
- ▶ Mineral rebalancing
- ▶ Hydratation
- ▶ Microcirculation
- ▶ Oxygenation
- ▶ Tissue trofism



T.M. and A.M. : Main common indications

➤ Dermatology

Acne

Seborrheic Dermatitis

Eczema

Psoriasis

▶ Flebology

Chronic venus diseases

Angiopathic dermatitis

Lynfedema

➤ Body blemishes

PEFS (cellulitis)

Localized adiposity

▶ Anti-aging medicine

Prevention and cure of aging signs

CELLULITIS (PEFS)

EDEMA-FIBROUS AND SCLEROTIC DISEASE

It's considered the most common aesthetic problem in the western world

BUT

It's NOT just a blemish

It's NOT just an accumulation of Fat cells

It is a **REAL INTERSTITIAL TISSUE DISEASE** with connective-microcirculation alterations
(condition of mild chronic inflammation)

Can start from puberty with a multifactorial etiology

- Genetic bases
- Hormonal disease
- Intestinal «disbiosi»
- Overweight and obesity and Metabolic syndrome
- Drugs
- Lifestyle (diet , smoking , sedentary ...)





Prevention and care of Cellulitis (PFES) in Thermal centers
through the integration of Thermal and Aesthetic treatments

PROGRAM

- **BALNEOTHERAPY** : Hydrotherapic single bath , Water Passage , Showers
- **CARBOSSITHERAPY** or CARBON-DIOXIDE (CO₂) THERAPY



Balneotherapy GUIDELINES

POOLS

Max height 120-130 cm , diving handrail along perimeter 10 cm chairs and beds (40 and 20 cm) , whirlpools

HYDROTHERAPIC SINGLE BATH

standard size – length 210-220 cm , width 85-90 cm , capacity 200-220 lt , whirlpools

TEMPERATURE	33-35° C (VARIABLE)
TREATMENT TIME	20 MIN
BODY IMMERSION	3/4
AFTER TREATMENT	REST PERIOD OF 20 MIN

Balneotherapy GUIDELINES

LOCAL BALNEOTHERAPY

baths for hands and feet
temperature variable , time 20'
Whirlpools

WATER PASSAGE

2 long (8-10 mt) and narrow pools ,
near but no connected, 50-60 cm,
deep, water with different
temperature : 27-30°c/24-26°c .
Whirlpools, cobblestone floor.



THERAPEUTIC SHOWERS

UNDERWATER SHOWER Operator directs the underwater jet (1-3 atm) toward the patient immersed

JET SHOWER Operator directs, with specific method, a powerful ject of thermal water. Patient standing at a distance of 2,5-3 m
treatment time : 10'



THERAPEUTIC SHOWERS



RAIN SHOWER (VICHY SHOWER)

patient lying on particular bed.
Multiple filiform jets of thermal
water on the whole body. Treatment
time : 15'

SCOTTISH SHOWER patient standing
surrounded by dispenser that emit
thermal water at different
temperature. Alternating or
simultaneously. Treatment time 5'



CARBOSSITHERAPY

CARBON DIOXIDE (CO₂) THERAPY

Use of carbon dioxide for medical purposes .

Thermal carbossytherapy was born in Royat (France) in 1932 for the treatment of vascular disease .

Carbon thermal waters are still very used today

In Aesthetic medicine the gas is injected into the subcutaneous and intradermal area

Microinjection with a tiny needle attached by a little tube to the appropriate device

CARBON DIOXIDE

It's not toxic and can not cause embolism

It's compatible with our body (constantly produced)

It's eliminated by respiratory system

The gas is used in surgery (laparoscopy) and in diagnostic (colonoscopy)





CARBOSSITHERAPY : general indication

AESTHETIC MEDICINE

Cellulitis and local adiposity
Facial-body skin laxity
Alopecia
Stretch marks

PHLEBOLOGY

Linfatic an venous
Chronic disease
Skin ulcers

RESULTS
&
SCIENTIFIC
VALIDATIONS

DERMATHOLOGY

psoriasis

ORTOPHEDICS

Antalgical therapy
Trauma

CARBOSSITHERAPY

CONTRINDICATIONS

- ▶ Hypercapnia (excess of carbon dioxide in the blood) : Severe respiratory, cardiac and renal failure
- ▶ Drugs : acetazolamide and other carbon disulphide inhibitors
- ▶ Severe anemia

ADVERSE EFFECTS

- ▶ Feeling of rattling : 90-100%
- ▶ Hematoma at the injection site: 10-20%
- ▶ Pain in the diffusion area : 50-60 %

CARBOSSITHERAPY : Effects in A. M.

- ▶ IMPROVES MICROCIRCULATION
- ▶ DIRECT AND INDIRECT LIPOLYSIS
- ▶ INCREASE THE TISSUES OXYGENATION
- ▶ IMPROVES SKIN ELASTICITY
- ▶ CARBON DIOXIDE is a POWERFUL VASODILATATOR
- ▶ REAL and NO-REAL NEOANGIOGENESIS
- ▶ BOHR EFFECT : The release of hemoglobin oxygen increases with decreasing pH and increasing PCO₂.
- ▶ direct mechanical action on FAT CELLS and reactivation lipolytic enzymes







Protocol development

1 DAY / WEEK

10 SESSIONS

- ▶ HYDROTHERAPIC SINGOL BATH or POOL whit hydromassage and underwater shower
- ▶ CARBOSSITHERAPY
- ▶ WATER PASSAGE

30 Minutes of relax between treatments

CLINICAL AND ULTRASOUND CONTROL AFTER THE 5° AND AT THE END OF THE PROGRAM

BALNEOTHERAPY

- ▶ POOL
 - ▶ HYDROTHERAPIC SINGLE BATH
- Hydromassage and/or underwater shower
- ▶ WATER PASSAGE

TECNIQUE AS GUIDELINES

CARBOSSITHERAPY

NEEDLE : 30 g / 13mm

NEEDLE INCLINATION : 30 °

QUANTITY of GAS ; variable (not less than 100 for injection area - maximum 1000 cc for total treatment)

FLOW : variable (min 50 cc and max 100 cc/min)

Treatment time : 30 min

Integrate PEFS care protocol

THERMAL CENTERS INVOLVED



Helvetia thermal spa , Porretta Terme (BO)

Petriolo spa resort Terme , Civitella P (GR)



METHODOLOGY

- ▶ Women
- ▶ Age 45-60 years
- ▶ Clinical and ultrasound diagnosis
- ▶ PFES in all progressive phases
- ▶ Lifestyle : diet, motor activity ...
- ▶ Concause : smoke, drugs, pathologies ..

Different types of water

Even Japanese macaques know that the
Thermal treatments are wonderful



THANKS FOR YOUR ATTENTION