

Pier Antonio Bacci

# CELLULITIS

F.E.F. From Diagnosis To Therapy  
(Female Evolutive Fibroedema)



PRESENTATIONS BY

Carlo Alberto Bartoletti, Carlo D'Aniello and Ivo Pitanguy



# **CELLULITIS**

## **F.E.F. FROM DIAGNOSIS TO THERAPY**

### **Female Evolutive Fibroedema**

*Copyright © 2012, Officina Editoriale Oltrarno S.r.l.- Firenze*

*All rights reserved. This book is protected by copyright. No part of this book may be reproduced in any form or by any means, including photocopying, or utilized by any information storage. Care has been taken to confirm the accuracy of the information presented and to describe generally accepted practices. However, the editor, authors and publisher are not responsible for errors or omissions or for any consequences from application of the information in this book and make no warranty, express or implied, with respect to the currency, completeness, or accuracy of the contents of the publication. Application of this information in a particular situation remains the professional responsibility of the practitioner.*

*The Publisher*

*Design coordinator:*

Davide Di Maggio

*Layout:*

Massimo Rubino

*Translation by:*

Miriam Friedman

*Photographs of the clinical cases by:*

Pier Antonio Bacci

*Special thanks to:*

Marinella Hall

*Printed by*

Tipolitografia Petrucci Corrado & C. s.n.c. Città di Castello

*for*

Officina Editoriale Oltrarno S.r.l. - Firenze

**<http://www.oeofirenze.it>**

**e-mail: [info@oeofirenze.it](mailto:info@oeofirenze.it)**

ISBN: 978 88 905033 5 1

**Pier Antonio Bacci**

# CELLULITIS

F.E.F. FROM DIAGNOSIS TO THERAPY

FEMALE EVOLUTIVE FIBROEDEMA

PRESENTATIONS BY

CARLO ALBERTO BARTOLETTI, CARLO D'ANIELLO AND IVO PITANGUY



---

## PRESENTATION



**I**t was a pleasure to receive the request to present Pier Antonio Bacci's book on "cellulitis".

The study and treatment of this disease have represented the first historical appearance of Aesthetic Medicine, introduced by me in Italy.

My staff and I have dealt with "cellulitis" since the late 1960s and since then, as regard to research and method, knowledge has quite changed. Since 1982 there has been a distinction between local adiposity and edematous fibrosclerotic panniculopathy, degenerative process of the subcutaneous adipose tissue, favored by several factors.

We then described the so-called "false cellulitis", not pathological, often linked to rapid and excessive weight loss for which the best treatment is often a slight increase in weight and muscle building.

In the vast world of medicine and surgery, there are many treatments which now can be used, from mild to more invasive, depending on the gravity of the situation and the patient's request.

Dr. Bacci, who is entitled to be part of "cellulitis' history" for his continued effort in the study of this disease, examines, in this book, the various aspects of the disease, beginning with the diagnosis, going through a careful examination of the therapies, from the oldest to the newest, ending with the risks and possible complications, complemented with a good number of clinical cases.

*Carlo Alberto Bartoletti*

President of the Italian society of aesthetic medicine.

President of the Scientific Committee of International School of Aesthetic Medicine International Medical Foundation Fatebenefratelli, Rome.

## PRESENTATION



Cellulite is a dramatically social problem, especially when seen through the suffering it causes in women who are willing to put themselves through anything in order to resolve this annoying flaw that cannot be eliminated.

Rivers of ink have flowed on this subject in every part of the world, but there are very few publications that confront the problem in its deep and complex aetiology.

There are various currents of thought; some don't believe in cellulite, some believe it is a fatty alteration, some that it is a fibrous sclerosis, others that it is a venous-lymphatic pathology, and even those who believe it is a physiological and non-pathological expression of femininity.

In plastic and cosmetic surgery, even from a legal point of view, the norm by which the cosmetic function gains the importance of an organ is well known and thus, its alteration becomes functional damage. For this reason cellulite must be considered an alteration of the function of the organ of relations.

Pier Antonio Bacci has long been active at the University of Siena, as a student, a specialist and as a professor of Phlebology and Cosmetic Surgery in the School of Specialization in Surgery and Plastic Surgery. He has promoted and collaborated in the study of symptomatology, searching for causes and for meticulousness in treatment. In his career he has participated in scientific exchanges in around 78 countries, determining in person the development of many methodologies, such as cosmetic phlebology, endolaser coagulation, Endermologie, compressive microvibration, Biodermogenesis for stretch marks, oxygen-ozone therapy, carboxytherapy, and others in widespread use, but it is above all to the study of the complex world of what we call cellulite that he has dedicated his greatest efforts.

In 2000 he published his first book on the subject "Cellulite 2000", then translated into Spanish and English, where he firmly emphasized the importance of the interstitial matrix and its alterations on the mesenchyme and on the evolution of cellulite.

Ten years have passed and science has revealed many of its secrets, even the mysterious interstitial matrix has offered answers that have led to new therapeutic solutions, but cellulite always maintains its dramaticism in female suffering, its criticality in often overly superficial therapy, its difficulty in diagnosis and in the management of the patient.

Pier Antonio Bacci in his new publication returns to that timid message in order to give a strong boost to the invitation to never subjugate medical ethics to cosmetic and profit motives, always keeping high the nobility of the medical act which, if carried out

---

well, will also allow improvement in outside appearances and in quality of life.

Cellulite can also be a complex and many-sided pathology, and if at times a simple massage or cosmetic treatment determines improvement, there is almost always need of sequential, periodic treatments that have a specific aim and protocol determined by a precise diagnosis, and which sometimes require surgery.

Today we can make a diagnosis, and it is right to do so, knowing that often it will make up an important moment in preventative medicine for slowing down the evolution of chronic and degenerative alterations.

For all this, especially at a moment in history when all values seem to be crumbling, this new publication on cellulite constitutes a cultural revolution that must not be underestimated. The author does not intend to give certain answers but only to indicate sure and luminous paths to be taken in respect to those patients who ask us to make their lives more serene, in the meantime lessening symptoms and disturbances.

Complements to Pier Antonio Bacci for his work and for the humility demonstrated in sharing the knowledge and experience of those who have given years to science.

***Carlo D'Aniello***

Professor of Plastic Surgery at the University of Siena.

Director Department of General and Specialized Surgery.

Director School of Specialization in Plastic, Reconstructive and Cosmetic Surgery.

Director of Master's program in Cosmetic Surgery.

Past President of the SICPRE (Italian Society of Plastic, Reconstructive and Cosmetic Surgery).

---

## PRESENTATION



**S**kin dimpling, caused by irregularities of the dermal-adipose tissue, has been termed cellulites. This is an inappropriate term, since there is in fact no inflammatory reaction. Although this defect may be viewed with slight importance, cellulites is a major cause for aesthetic treatment, especially in the female population. Different medical and non-medical specialties have been involved with the research and solution of this problem, with questionable results. This book, by Pier Antonio Bacci, brings to the reader a vast amount of information regarding the approach to skin dimpling. It is an interesting addition to our medical literature, and shows the long and persistent search that the author has dedicated to this issue. Dr. Bacci's work will prove to be a valuable contribution to the ever-expanding field of plastic surgery.

*Ivo Pitanguy*

Head Professor of the Post-Graduate Courses in Plastic Surgery of the Pontifical Catholic University of Rio de Janeiro and the Carlos Chagas Post-Graduate Medical Institute. Member and patron of the Brazilian Society of Plastic Surgery. Member of the Brazilian National Academy of Medicine, and the Brazilian Academy of Letters. Visiting professor, ISAPS, FACS, FICS.

*Dedicated to Prof. Ivo Pitanguy*

*Pier Antonio Bacci*

---

# PREFACE

*The imagination is important, not knowledges*  
(A. Einstein)

A doctor who must give answers to people suffering from a disease is used to thinking in terms of diagnosis, therapy, rehabilitation and healing, for which questions are not always asked about the “personal and social problem” of the recipient of his treatment, but in the face of a cosmetic disease, or worse, of a cosmetic defect, things change a great deal.

First of all, there is no danger to life and the physical suffering is small compared to serious diseases. Moreover, these patients are “substantially” healthy, in the sense that they go to the doctor mostly for “cosmetic” reasons, or rather to improve their outer appearance. And it is precisely in this phase that often the operator commits his first error, that of underestimating the possibility that behind that request there may be a true and proper pathological alteration, perhaps in its initial stages, with clinical symptoms that can lead to a diagnosis.

The dream of any cosmetic doctor or surgeon is that of seeing his patient smile, and differently from other specializations and even from plastic and reconstructive surgery, where recovery from suffering goes along with the satisfaction of having won the battle against a disease, in the aesthetic and cosmetic sector the patient’s request is almost always concentrated on problems relative to outer appearance, something the patient believes is a defect. It would be disparaging and disrespectful of the freedom and dignity of every person to think that it is “all nonsense”, considering that very often feeling beautiful is as important as feeling well. And this is all the truer in a free and modern society where our outer appearance permits the best individual realization for feeling more secure, for giving the best of oneself to others and, why not, for having the best chances in life.

My great friend, the Brazilian master, Prof. Ivo Pitanguy, the father of plastic and cosmetic surgery in the world, always states in his brilliant lessons:

*“When you operate on a disease you must always have the resolution of physical suffering as your objective, improving the organs’ functionality; when you treat a cosmetic flaw you must always have the patient’s smile and dignity as your objective, but you must always distinguish clearly between flaws and pathology”.*

Thus, first of all a question: what is the **concept of illness**? Is illness what a doctor considers illness or what means disease for a patient, or can we consider illnesses even the initial changes in basic life phenomena of our organism or everything that changes the patient’s sentimental life? It is not the aim of this book to give these answers, but to push for reflections because it is the duty of every doctor to heal his patients starting by responding to the most important teaching deriving from the ancient Salernitan Medical School:

*“prima non nocere, secundum sedare dolorem”.*

Prevention is not just the task reserved for the health worker alone, since every person has the right/duty to protect his own health, but the first duty of every doctor is certainly that of helping the patient in this task, thus postponing the moment for his therapeutic intervention on full-blown disease.

With this I don’t want to defend the ancient Chinese who paid their doctors as long as the patient was healthy since when a patient became ill it meant that the doctor had failed, but the basic concept of this philosophy of behaviour contained some great truths, including total respect for the person who entrusts himself and his health to his doctor, the greatest expression of trust, as well as awareness that all diseases, especially chronic, metabolic and degenerative diseases, always begin with small changes and early diagnosis of these is the first step in **preventive medicine**.

Every health worker must make an effort to find even the smallest changes in the organism and this is possible by taking advantage of some signs offered by what we call cosmetic flaws: just think of the changes in colour and hydration of the skin, of the presence or lack of paraesthesia, heaviness or vague tissue painfulness, spontaneous or provoked.

---

It's sufficient to think of the postural and dynamic state of the foot, of the type, colour and site of telangiectasias, of changes in the abdominal or bitrochanteric contours, of the different expressions of aging of the face up to the so-called "orange-peel" that represents, finally, the instrument the organism uses to say: "*Doctor, help me*" because something is starting to not work right.

While writing this volume I had the honour to prepare a paper for the Undersecretary of Health, the Honourable Francesca Martini, about the necessary revision of the methods and protocols of treatments used in cosmetic medicine, in particular regarding treatments aimed at reducing fatty tissue and cellulite. With extreme seriousness I took advantage of what could be an important moment for revision and reflection for the entire sector, but I couldn't ignore the most important question in my entire paper:

***"Confirming that any method used can have risks and complications, is it right to use these methods for cosmetic purposes and not to cure diseases?"***

This question leads to another:

***"If these methods are used for cosmetic purposes and not to cure diseases, does that justify the fact that they can be prohibited or permitted for use only by particular professional categories?"***

All of these reflections are important and open many problems that researchers, scholars and politicians must find answers for, but, at least for me, everything changes when entering the world of cellulite because here we are truly facing a cosmetic flaw that is very often the expression of pathological alterations, perhaps in their initial stages. Close observation and precise application of semiotics allow us to reach a distinct classification of the type of cellulite we must treat. Thus, if we are able to make rather early diagnoses of initial metabolic alterations, why not do it?

Indeed, if degenerative diseases begin at this point, we believe that this is the true task of what we call "cosmetic doctors", or of any doctor who uses medical semiotics along with the use of targeted and particular treatments aimed at cosmetic, as well as clinical improvement. But all of this requires ethics, seriousness and the proper professional training.

Therefore we ask another question:

***"Is cellulite a physiological expression or a cosmetic pathology?"***

I don't want to answer myself, but I do want to make a consideration. If cellulite is a physiological expression then its treatment is not of medical pertinence, but belongs to the cosmetician. If, instead, it is the expression of disease, even initial, then its treatment must be of medical pertinence, a true act of medicine that must follow precise diagnostics, a classification and a scientifically valid therapeutic procedure.

In the treatment of the hodgepodge of cellulite we find doctors, surgeons, physiotherapists, osteopaths, naturopaths, dieticians, cosmeticians, faith healers and so on. When they are serious they all are a little bit right but it isn't always that way so we must also put ourselves on the patient's side. We know that many women who have undergone liposuction for cellulite are not happy with it, first of all due to incorrect indications and then because often the whole subsequent and always necessary medical, physiotherapeutic, dietetic and cosmetic aspect, is lacking. In the same way those who have undergone treatments with massages, mesotherapy or carboxytherapy to eliminate localized fat and *saddle bags* can be demoralized since these cases are of surgical pertinence and are different from cellulite.

Cellulite is a very annoying **cosmetic flaw**, in fact, the least tolerated defect in the world. Very often this defect becomes a **symptom** that requires a medical, dermocosmetic and physiotherapeutic diagnosis and treatment. Our cosmetic flaw can hide the beginning of a disease or, rather, of a **cosmetic disease**.

Whether we are talking about a cosmetic flaw or pathology, "orange-peel" always represents an evolving pathological expression of evolving inflammatory-degenerative alterations of the connective tissue, of the microcirculatory system, of the adipose tissue and of the dermis-hypodermic structure. For all these reasons the doctor must always give importance to "orange-peel", making a precise diagnosis and classification, leaving the treatment of non-pathological cases to physiotherapists, cosmeticians and non-medical operators, but intervening with seriousness and targeted and proven methods where the cosmetic flaw has transformed into pathology.

I believe that the best treatment for this bothersome cosmetic pathology, which represents various pathological expressions, can be found in the perfect integration between doctor, surgeon, physiotherapist and cosmetician. Therefore it is necessary to make an effort to increase the awareness of this problem and its physiopathology, since today cellulite, or "*female evolutive fibroedema*" represents a social problem in the sense that it is a progressive illness that alters quality of life and may also lead to future degenerative diseases such as arthropathy, painful panniculopathy, painful lipodystrophy, symptomatic venous-lymphatic insufficiency, ulcers ad malleolar tissue dystrophy.

---

It is clear that there must be a crackdown so that “*cosmetic doctors*” become more doctor-like, the cosmetic aspect will follow. The “*cosmetic*” cure must never be a “*diminution*” but a “*sublimation*” of every act of medicine.

In honour of this teaching I have always imposed on myself a pause every five years for a period of research, study, revision and reflection to review and question all my knowledge and even my professional activity, activity characterized by a long daily practice but with the always incumbent danger of feeling “successful”, particularly in the treatment of cosmetic diseases.

Every time a doctor reviews himself his mind is obsessed by the ancient question:

***“Have I always respected the Hippocratic Oath? How much of the therapy used in cosmetic medicine is worthy of being an act of medicine?”***

In medicine, as in life, there are no dogmas or eternal truths, everything evolves and updates, for which the secret of the serious doctor, purposely leaving aside the good doctor, is to keep up with or anticipate the times.

In this book, which is the updated version of my book from 2000 “**Cellulites**”, I have tried to transfer my doubts and certainties, certainly treasuring the many moments of scientific exchange throughout the world, in particular with the colleagues I consider co-authors of this volume and whom I thank. The years have gone by, knowledge has changed, we have changed, but today we know that a correct lifestyle and a good diet can be true prevention for all the ageing processes. All the diseases that attack the physiology or appearance of the human organism must be treated seriously in order to improve or conquer them since the conquest of beauty, just as health, is the patient’s right and the doctor’s duty. If this is true, the patient has the duty to do everything to keep healthy and the doctor must help him also in the prevention phase, in other words before his “client” becomes his “patient”.

The purpose of this book is to try to push doctors and other operators into considering cellulite as a cosmetic flaw that may be hiding a disease, a cosmetic flaw that sooner or later always turns into a multifaceted evolutive degenerative pathology. Someone with cellulite is a person who suffers and who perceives this flaw as a true illness. To fight it we don’t need many arms, just a few therapies that have been demonstrated as valid in scientific experimentation and in medical practice.

If we know how to make our patient understand that the body cannot be changed but only improved and, in a modest way, shaped, we will have let him know that beauty is a natural gift that requires a continuous daily conquest that starts when we are small and never ends: just like the Health that Plato puts in first place in his Scale, followed by Beauty and Fortune.

Finally, I must give honour to my master **Ivo Pitanguy** for his profound and unmatched friendship as well as for his teaching of the philosophy that must always guide the mind in every moment of life and our profession. I must also thank with great recognition Prof. **Carlo Alberto Bartoletti**, who many years ago introduced me to the world of cosmetic medicine, Prof. **Carlo D’Aniello** for his teachings on plastic surgery and the university mentality, not forgetting Prof. **Sergio Mancini** with whom I have shared research and surgery for over twenty years at the University of Siena.

**To conclude, the moral of life is: “Never say never”.**

***Pier Antonio Bacci***

---

# ACKNOWLEDGEMENTS

A sincere thanks to Professor **Carlo Alberto Bartoletti** and Professor **Carlo D’Aniello**

A sincere thanks to those lifelong friends I would like to consider co-authors for their contribution to this work:

- **Francesco Albergati** (Milan) – Interstitial Matrix
  - **Domenico Amuso** (Modena) – Aesthetic Medicine
  - **Lucio Andreassi** (Siena) – Dermatology
  - **Emanuele Bartoletti** (Rome) – Cosmetic Medicine
  - **Silvia Betti** (Florence) – Dermatology
  - **Cesare Brandi** (Siena) – Carboxytherapy
  - **Oscar Eugenio Brizzio** (Buenos Aires) – Phlebology
  - **Maurizio Busoni** (Florence) – Physics Electromedical
  - **Corradino Campisi** (Genova) – Lymphology
  - **Franco Canestrari** (Urbino) – Oxidation
  - **Maurizio Ceccarelli** (Rome) – Cell Metabolism
  - **Andrea Fratter** (Milan) – Biochemistry
  - **Nicola Fortunati** (Terme Fonteverde) – Balneotherapy
  - **Victor Garcia** (Barcellona) – Adipose Tissue
  - **Mitchell Goldmann** (S. Diego-USA) – Dermatology
  - **Julio Ferreira** (Buenos Aires) – Liposculpture
  - **Vincenzo Gasbarro** (Ferrara) – Venous-lymphatic Systems
  - **Andrea Ignaciuk** (Warsaw) – Cosmetic Medicine
  - **Deborah Impieri** (Rome) – Jurisprudence
  - **Marcello Izzo** (Nola) – Oxidation and Lipoedema
  - **Gustavo Leisbashoff** (Dallas) – Liposculpture
  - **Federica Lerro** (Rome) – Jurisprudence
  - **Francesco Malatesta** (Montevarchi) – Plastic Surgery
  - **Torello Lotti** (Florence) – Dermatology
  - **Sergio Mancini** (Siena) – Phlebology
  - **Fabrizio Mariani** (Siena) – Phlebology
  - **Alberto Massirone** (Milan) – Mesotherapy
  - **Francesco Marotta** (Milan) – Oxidation
  - **Enrico Oliva** (Rome) – Lymphology
  - **Giorgio Oskarbski** (Rome) – Laser Physics
  - **Raul Pinto** (Buenos Aires) – Physiopathology of cellulite
  - **Ascanio Polimeni** (Rome) – Psycho-neuroimmunology
  - **Pier Luigi Rossi** (Arezzo) – Nutrition and Metabolism
  - **Giovanni Serni** (Florence) – Sport Medicine
  - **Giorgio Terziani** (Imperia) – Cell Oxidation
  - **Fulvio Tomaselli** (Rome) – Aesthetic Medicine
  - **Roberto Tulli** (Sao Paulo) – Vascular Surgery
  - **Tommaso Violi** (Rome) – General Medicine
- and to the physiotherapists and assistants:
- **Sabrina Frappi, Serena Leonardi, Silvia Vannuccini - Silvia Goti, Ilaria Ottanelli**

## **Pier Antonio Bacci**

*Pier Antonio Bacci, as well as studying diseases of the veins and lymphatics, since 1977 has been dedicated to the problems of plastic and cosmetic surgery and medicine, participating in Fellows classes and short courses in Brazil, Argentina, France, Israel, Canada and the U.S.A.*

*A specialist in Cardiovascular disease and in Surgery, he was adjunct professor of “Surgical Techniques” at the School of Plastic Surgery of the University of Siena (1998-2000) and of “Cosmetic Surgery” at the School of Specialization in Surgery of the University of Siena (1999-2010). He also teaches “cosmetic pathology of the adipose tissue” in the Master course of Cosmetic Medicine at the Autonomous University of Barcelona and in the Master course of Cosmetic Medicine of the University of Siena.*

*He has presented at numerous national and international conferences studies on surgery for varicose veins and large legs, studies on cosmetic phlebology for capillaries and pigmentation, spa methods and methods of cosmetic physiotherapy and of wellbeing, surgical techniques for the correction of cosmetic flaws of the buttocks, the face and the lips, but above all studies relative to the world of cellulite, on which he has published works translated into Spanish and English.*

*He is an expert in problems connected to cosmetic flaws of the legs and is considered a pioneer and opinion leader in mini-invasive surgical techniques of the face and the buttocks, with personal methods and presentations in over 40 countries.*

*He is an honorary member of different scientific societies and the author of many scientific publications, articles and television interviews.*

*He is a regular member of the Italian Surgical Society, a member of the Italian Society of Plastic Surgery, a regular member of the Italian Society of Cosmetic Medicine, a past advisor of the Italia College of Phlebology, President of the Italian Academy of Beauty of Arezzo, coordinator of the Wellbeing sector in the Risk Management Forum of Arezzo (2008-2010) and scientific director of Rome International Aesthetics 2011 at the Rome Fair.*

*He lives in Arezzo and also has offices in Florence and Rome.*

*In Arezzo he is a surgical consultant at the Centro Chirurgico Toscano; in Florence he is Director of Surgery at the Maria Teresa Hospital Clinic.*

**info@baccipa.it**



# GENERALE INDEX

PRESENTATION OF C.A. BARTOLETTI .....	4
PRESENTATION OF C. D'ANIELLO .....	5
PRESENTATION OF I. PITANGUY .....	7
PREFACE .....	9
ACKNOWLEDGEMENTS .....	12
AUTHOR .....	13
CHAPTER 1 – BACKGROUND: HISTORY AND DEFINITION .....	17
HISTORY .....	19
THE LEGS .....	23
CELLULITE .....	24
DEFINITION .....	25
A) WHAT IS CELLULITIS IN MEDICAL PATHOLOGY? .....	26
B) WHAT IS CELLULITE IN COSMETIC MEDICINE? .....	26
C) HOW CAN UNSIGHTLY CELLULITE BE DEFINED? .....	26
D) WHY SHOULD WE WORRY ABOUT CELLULITE? .....	27
CHAPTER 2 – THE WORLD OF THE OEDEMA .....	29
INTRODUCTION .....	31
LOCALIZED OEDEMAS .....	33
MICRO-CIRCULATORY SYSTEMS .....	35
THE LYMPHATIC TREE .....	38
THE FOOT IN PHLEBOLOGY .....	38
FROM LIPODEMA TO LIPOLYMPHEDEMA .....	44
LYMPH .....	44
VARIATIONS IN THE LYMPH .....	45
REFLECTIONS ON WATER .....	45
CHAPTER 3 – ADIPOSE TISSUE .....	49
ADIPOCYTE .....	52
HYPODERMIS AND METABOLISM .....	54
LIPODYSTROPHY .....	56
THE LYMPHOADIPOSE SYSTEM .....	57
CHAPTER 4 – THE INTERSTITIAL MATRIX .....	59
DEFINITION .....	62
LIGHT AND MATTER .....	66
SOL AND GEL .....	67
MATRIX AND ADIPOSE TISSUE .....	71
PIGMENTATION AND METABOLIC STATE .....	73
EXTRACELLULAR MATRIX .....	74
CHAPTER 5 – PHYSIOPATHOLOGY OF F.E.F. .....	79
PHYSIOPATHOLOGY .....	81
FORMATION OF CELLULITIC FIBROEDEMA .....	87
HOW DOES F.E.F. ARISE? .....	89
WHEN DOES CELLULITE START TO SHOW UP? .....	89
FACTORS THAT PREDISPOSE FOR CELLULITE .....	90
FACTORS THAT TRIGGER CELLULITE .....	92
CLASSIFICATION .....	92
THE BIMED-TCP CODE .....	95
TCP CODE .....	98
FACTOR T .....	98
“ANTERA” CAMERA .....	99
FACTOR C .....	100

FACTOR P .....	100
- BREU-MARSHALL ULTRASOUND COMPRESSION TEST .....	100
- THE TCP CODE .....	102
- TISSUE METABOLIC STATE.....	102
<b>CHAPTER 6 – BEFORE THERAPY</b> .....	103
DIAGNOSIS .....	105
MEDICAL HISTORY .....	105
CLINICAL EXAM .....	105
INSPECTION AND PALPATION .....	106
POSTURE EVALUATION .....	107
PHLEBOLYMPHOLOGICAL EVALUATION.....	107
ULTRASOUND OF THE ADIPOSE TISSUE.....	107
LABORATORY EXAMS .....	108
ROM’S TEST .....	108
STS HEAVY METALS TEST .....	109
PRIMARY INSTRUMENTAL EXAMS .....	110
DOPPLER .....	110
COLOUR DOPPLER ULTRASOUND .....	110
LIGHT REFLECTION PHOTOPLETHYSMOGRAPHY .....	110
ULTRASOUND.....	111
DYNAMIC FOOT EXAMINATION.....	112
THERMOGRAPHY .....	112
PHOTOGRAPHY.....	112
CONSTRUCTING THE DIAGNOSIS .....	112
DISTRIBUTION .....	113
CONSISTENCY .....	113
EVOLUTION.....	114
THERAPEUTIC STRATEGY.....	115
THE CLINICAL RECORD .....	115
STAGE OF CELLULITE .....	115
FAT MASS INDEX .....	116
BIMED CODE – TCP CORRECTED.....	116
DOCUMENTATION .....	120
THE FIRST VISIT.....	120
PHOTOTYPE.....	120
INFORMED CONSENT .....	121
POST-SURGICAL RECOMMENDATIONS .....	128
POST-SURGICAL RECOMMENDATIONS FOR LIPOSCULPTURE.....	128
MANAGING THE POST-SURGICAL PATIENT .....	128
<b>CHAPTER 7- DIET THERAPY</b> .....	131
PURIFICATION THERAPY .....	133
HYDRO-COLON THERAPY .....	134
PHARMACOLOGICAL THERAPY.....	134
NUTRITION.....	135
CONSCIOUS EATING .....	138
SLEEP.....	143
BLOOD CHEMISTRY EXAMS .....	143
<b>CHAPTER 8 – COSMETIC PHYSIOTHERAPY</b> .....	145
PHYSICAL ACTIVITY.....	147
LIFESTYLE.....	150
SAUNA.....	151
THE SPA.....	151
COSMETIC PHYSIOTHERAPY.....	152
MASSAGE .....	152
MANUAL LYMPH DRAINAGE .....	153
THE ENDERMOLOGIE® METHOD.....	154
ENDOSPHERES COMPRESSIVE MICROVIBRATION .....	156
RADIOFREQUENCY.....	161
SHOCK WAVES .....	162
SIMULATED WALKING.....	165

CELLULONATURE .....	165
PRESSOTHERAPY .....	166
METHODOLOGY.....	166
<b>CHAPTER 9 – THERAPIES</b> .....	167
MESOTHERAPY.....	169
CARBOXYTHERAPY.....	175
LASER THERAPY .....	178
LASERLIPOLYSIS .....	178
LASER-LIPOWASH .....	179
BIOHERMAL LIPASE .....	181
LIPOPLASTY.....	185
VASCULARIZATION OF THE FATTY TISSUE.....	187
AEROLAR FAT .....	187
DEEP FAT.....	187
SELECTION OF PATIENTS .....	187
PRE-SURGICAL EXAMINATION.....	188
PRESCRIPTIONS .....	188
POST-SURGICAL SCHEDULE.....	188
LIPOFILLING .....	189
LIFTING .....	192
<b>CHAPTER 10 – RISKS AND COMPLICATIONS</b> .....	197
MESOTHERAPY. (ALSO CALLED INTRADERMOTHERAPY, MICROTHERAPY, ETC.) .....	199
LIPOCLASTIC INFILTRATIONS. (ALSO CALLED LIPOCYTOLYSIS, LIPODISSOLVE, ETC.) .....	200
CARBOXYTHERAPY.....	204
OXYGEN-OZONE THERAPY.....	204
LASERLIPOLYSIS .....	204
LIPOSUCTION AND LASERLIPOSCULPTURE .....	204
RADIOFREQUENCY .....	205
ULTRASOUND .....	207
MECHANICAL PHYSIOTHERAPY METHODS. (LIKE ENDERMOLOGIE, COMPRESSIVE MICROVIBRATION, COMPRESSIVE ENDOSPHERES, MICROALVEOLAR ASPIRATION, ETC.) .....	208
MASSAGE AND AESTHETIC COSMETIC TECHNIQUES.....	208
PHLEBOLOGY AND SURGERY .....	209
<b>CHAPTER 11 – PHOTODYNAMIC THERAPY</b> .....	213
VARTAM THERAPY .....	216
BIO-PHOTODYNAMIC THERAPY WITH MTHPC.....	216
ELECTROMAGNETIC LIGHT IRRADIATION .....	220
TREATMENT METHOD .....	222
OUR EXPERIENCES .....	223
RISKS AND COMPLICATIONS .....	226
<b>CHAPTER 12 – CLINICAL CASES</b> .....	227
<b>CHAPTER 13 – CONCLUSION AND BIBLIOGRAPHY</b> .....	259
<b>ANALYTICAL INDEX</b> .....	266



Officina Editoriale Oltrarno S.r.l.  
Firenze