

Table of Contents

Part I. ADIPOSE TISSUE BIOLOGY AND PHYSIOLOGY

Chapter 1. Subcutaneous adipose tissue

- 1.1. Formation and structure peculiarities
- 1.2. Adipose tissue as an endocrine organ
- 1.3. Adipose tissue aging
- 1.4. Adipose tissue aesthetic problems

Chapter 2. Orange peel

- 2.1. Etiology
- 2.2. Stages and clinical manifestation

Chapter 3. Obesity and the skin

- 3.1. Pathophysiology of skin in obesity
 - 3.1.1. Skin barrier
 - 3.1.2. Sebaceous glands and sebum production
 - 3.1.3. Sweat glands
 - 3.1.4. Collagen and wound healing process
 - 3.1.5. Microcirculatory system
- 3.2. General skin manifestations
- 3.3. Obesity and skin diseases
 - 3.3.1. Skin infections
 - 3.3.2. Inflammatory skin diseases
 - 3.3.3. Metabolic disorders
- 3.4. Obesity and rare skin conditions

Part II. AESTHETIC TREATMENT

Chapter 1. Subcutaneous fat remodeling: aesthetic strategy and methods

Chapter 2. Surgical methods

- 2.1. Standard vacuum liposuction
- 2.2. Booster liposuction
- 2.3. Ultrasound-assistant liposuction
- 2.4. Laser-assistant liposuction
- 2.5. Radiofrequency-assistant liposuction

Chapter 3. Physical methods

- 3.1. Scientific rationale
- 3.2. Mechanical treatment
 - 3.2.1. Molecular, cellular, and tissue effects of mechanotherapy
 - 3.2.2. Mechanotherapy methods
 - Manual massage
 - Pressotherapy
 - Vacuum therapy
 - Vibrotherapy
 - Vibro vacuum therapy
 - Vacuum roller massage
 - Compression-vibration therapy
- 3.3. Electrical therapy
 - 3.3.1. Microcurrents

- 3.3.2. Electrolysis
- 3.3.3. Radiofrequency (RF) therapy
 - Types of RF technologies
 - Molecular, cellular, and tissue effects
 - Resistive RF technologies: examples
- 3.3.4. Ultrahigh-frequency (UHF) therapy
 - Molecular, cellular, and tissue effects
 - UHF technologies: examples
- 3.3.5. Electromyostimulation (EMS)
 - Mechanism of action
 - Magnetic myostimulation
 - Electric myostimulation
- 3.4. Sound therapy
 - 3.4.1. Ultrasonic cavitation
 - 3.4.2. High-intensity focused ultrasound (HIFU)
 - 3.4.3. Shockwave therapy
- 3.5. Cryolipolysis
 - 3.5.1. Mechanism of action
 - 3.5.2. Cryolipolysis and body contouring
 - 3.5.3. Adverse effects
 - Causes and risk factors of paradoxical fat hyperplasia
- 3.6. Light therapy
- 3.7. Combination of physical methods to treat the orange peel

Chapter 4. Injection methods

- 4.1. Effects on adipose tissue
 - 4.1.1. Lipolysis activation
 - 4.1.2. Lipodestruction
- 4.2. Improvement of microcirculation
- 4.3. Revitalization
- 4.4. Carboxytherapy

Chapter 5. Cosmetic products

- 5.1. Active ingredients
 - 5.1.1. Lipolysis stimulation
 - 5.1.2. Fat “burning”
 - 5.1.3. Strengthening of the collagen-elastin framework and improvement of the dermal matrix structure
 - 5.1.4. Reducing swelling, improving microcirculation
 - 5.1.5. Anti-orange peel combinations
- 5.2. Cosmetic procedures

Chapter 6. Other methods for body contouring

- 6.1. Nutritional aids
- 6.2. Special clothing

Conclusion remarks

References