

# **CIDESCO International Riga School of Cosmetics**

AGITA CIMOSHKA

**Anti-cellulite massage**

**Riga, 2012 - 2013**

## Table of Contents

Summary

References

Introduction

1. Cellulite
  - 1.1 causes
  - 1.2 types
  - 1.3 stages
2. Lymphatic system
3. Anti-cellulite massage
  - 3.1 efficacy
  - 3.2 techniques
  - 3.3 protocol
4. Combined treatment of cellulite
  - 4.1 Use of apparatus technologies to combat cellulite
  - 4.2 Honey massage
5. Summary and conclusions

Annex (illustrations etc.)

### ***SUMMARY***

Cellulite is one of the most common problems in cosmetology nowadays. Externally it appears

as an uneven skin surface or “orange peel”. Nearly 90 % of women experience such skin changes. At the moment beauty industry offers a wide range of anti-cellulite activities, starting with professional anti-cellulite products, manual techniques, up to different machine treatments. It leads to a question – how to choose the best and most suitable treatment for oneself?

I chose the project theme “Manual anti-cellulite massage” in order to make sure that it is highly efficient and beneficial as well as compatible with other anti-cellulite treatments. Body contouring machine techniques are mechanical treatments but anti-cellulite massage is performed with hands, therefore a direct contact with the client is maintained. Thus it is possible to palpate and determine the problematic areas and work on them with a differentiating approach. Massage is performed on problem areas with an increased subcutaneous fat layer and liquid exchange problems.

The manual anti-cellulite massage stimulates lymph formation and drainage, helps to remove toxins and waste material from the body, increases blood circulation and metabolism as well as enhances the penetration of massage product’s active ingredients into the skin. Anti-cellulite massage improves the muscle tone.

Contraindications for anti-cellulite massage are similar to those of other massage types. These are: poor state of health, fever, nausea, vomiting, inflammation of lymph nodes, malignant diseases, acute skin diseases, thrombophlebitis, varicose veins, capillary network.

I performed a manual anti-cellulite massage treatment course on a 45 years old client. At the beginning of the course, her waistline was 78 cm, the thigh girth was 62 cm. The anti-cellulite massage was performed 2-3 times a week for the duration of 2 months. In addition to the massage, the client followed a balanced diet every 4 hours and consumed a sufficient amount of water every day. At the end of the course, her waistline was 72 cm and the thigh girth was 54 cm. Her weight decreased by 8 kilograms. The state of the skin visually improved. The skin became firmer and smoother, the appearance of cellulite decreased. Anti-cellulite massage is not a relaxing treatment. The client could feel pain in the cellulite areas during the massage but she was very satisfied with the results.

Anti-cellulite massage is efficient if conducted as a treatment course:

- cellulite stage I and II – perform the massage 2 times a week, 10 times in the course of 1,5 months. It is recommended to repeat the course 1-2 times per year;
- cellulite stage II and III – perform the massage 2-3 times a week, 10 -12 times in the course of 1,5 months. It is recommended to repeat the course 2-3 times per year;
- cellulite stage IV – perform the massage 3 times a week, 12 times. It is recommended to repeat the course every month.

In order to prolong the positive results after the massage treatment course, it is necessary to keep up the lifestyle changes, i.e., comply with the new habits of food consumption and physical activities and, in addition, to conduct anti-cellulite massage treatments for maintenance. I advise to repeat maintenance massage treatments once in every three weeks as well as to undergo the active massage course of 10-12 massage treatments twice a year.

There are different types of cellulite prevention activities. An important condition to achieve good results is to do sports, follow a proper eating regimen, consume a sufficient amount of liquids, perform self-massage, take contrast showers and use body peeling.

Everybody should find the most convenient cellulite therapy programme for home conditions to achieve the desired goal with satisfaction and positive emotions. At the beginning, the fight against the cellulite could seem tiring but the psychologists believe that lasting habits are formed in the course of four weeks. What may initially seem like a burden will become a daily habit.

In my paper I touched upon only a part of cellulite treatment methods. Today the technologies are evolving rapidly and all the time new machines and technologies are being offered. However, nothing can replace human hands. No matter what new machine technologies will be developed, the manual anti-cellulite massage will never lose its relevance.

My work on the project convinced me about the effectiveness of manual anti-cellulite massage and I will continue conducting this massage on my clients. If necessary, I will combine it with other cellulite treatment methods to further improve the desired result.

## ***Introduction***

Cellulite is a problem that affects approximately 90% of women worldwide and is one of the most common reasons for visiting a beauty salon. Well-being and self-esteem largely depend on the visual appearance of the body. Everybody wishes to have aesthetically attractive looks. In mass media as magazines, television, radio, there is lot of talk about cellulite, and variety of recommendations is suggested for addressing this problem. There have been different advertising slogans in which a cream promises to help "get rid of" cellulite, thus misleading women. Cellulite is a complex problem, and we can distinguish different types and also several stages. As a would-be beautician, I am well aware that creams are hardly sufficient for removing cellulite.

There do not exist any straightforward solutions against the signs of cellulite, therefore I chose the topic "Anti-cellulite massage" in order to carry out an in-depth study using publicly available information resources, both printed and electronic media, and find out what cellulite is, what causes it, why it affects females and practically never males. I intend to study and analyze the information gathered to be able to provide competent advice to my clients and recommend effective solutions. I want to explore which methods are effective for anti-cellulite treatment, and why. Of the methods for combating cellulite I would like to have a more extensive discourse on the anti-cellulite massage, because I believe manual massage techniques are the best for addressing the problems located in subcutaneous tissues. There is no single apparatus method that could replace direct contact with the client.

However, one should admit that anti-cellulite massage is no panacea. In order to achieve the desired results, the client needs to be proactive and keep to a balanced diet, practice sports, monitor the daily consumption of liquids and other methods I am discussing in this paper.

## ***Cellulite***

Cellulite is a cosmetic defect which shows as rough surface of skin, commonly called "orange peel". Both overweight and thin women can suffer from cellulite. One can develop cellulite

irrespective of age, body weight, physical exercise or build.

The explanation of the mechanisms of cellulite pathogenesis lies in impaired microcirculation in subcutaneous adipose tissues, leading to intercellular oedema, tissue hypoxia, acidosis and subcutaneous fat lipodystrophy.

Acidosis can be blamed for being the cause of next to all diseases. Acids attract Ca ions from bones and contribute to degradation of body bones – teeth, jaws, spinal vertebrae etc. Bread, pasteurized dairy products, sausages and meat in the diet, generating uric acid when processed, contribute to acidosis. Products containing acids - vinegar and products containing it, like marinades, beer, wine, sour unripe fruit, sauerkraut are especially harmful. It is useful to remember that sugar, when consumed with fruit or in jams, neutralises acids. Only basis are capable of neutralizing acids. Alkaline reactions in the body can be incited by drinking water, vegetable juices and fresh vegetables. Therefore it is critical to have a balanced diet and consume liquids in sufficient amounts.

There exists experimental proof that the intensity of metabolism in adipose tissue depends on the intensity of blood circulation – the better the blood circulation, the better the metabolism. Deterioration of blood supply to adipose tissue may lead to local adipocyte hypertrophy even if the body weight is normal. If the microcirculation is impaired, the fat remains locked in fat cells. This is why when one loses weight, the easily accessible fat, where the blood supply is optimal, would disappear first.

By understanding the mechanisms of pathogenesis, it becomes possible to understand and recommend the necessary anti-cellulite treatment. Improving blood circulation is a key aspect of the therapy.

Why does cellulite occur in almost 90% of women, whereas remaining untypical in men? Males, contrary to females, have subcutaneous fat in the thigh and abdomen area in the form of small lobes that are separated by connective tissue partitions that are diagonally oriented to the surface of the skin. Females have much bigger fat lobes and the partitions are oriented perpendicularly and parallel to the source of the skin, thus allowing the skin to stretch during pregnancy. This is why it is easier for fat cells to penetrate the dermis, when they get bigger in size, resulting in visibly uneven surface of the skin.

### ***What may cause cellulite?***

- Lifestyle and malnutrition. A diet rich in fat and sugar and poor in liquids contributes to developing cellulite. Irregular meals where sweet and fatty foods prevail promote fat deposition, especially at the lower parts of the body. The harmful products in the diet are preservatives, stabilisers, emulsifiers, thickeners, hormones in meat and fish received through specialised feed. Also deskbound occupation and lack of physical activity/sedentary lifestyle contributes to cellulite formation.
- Heredity. It determines the fat deposition areas in the body, as well as the severity of cellulite. This is due to location of  $\alpha$  and  $\beta$  receptors on the membranes of fat cells. On the hips, abdomen and thighs the number of  $\alpha$  receptors, which is responsible for lipogenesis (fat accumulation), is six times higher than that of  $\beta$ -receptors, so the fat splitting in these areas will be slower. These are the typical fat accumulation areas in

women.

- Hormonal imbalance. It can be caused by external factors such as stress, illness, hormonal contraception, the content of the food consumed; however, it can be also genetically determined. This is why also physically active people with correct eating habits are not immune to this problem. Female fat cells respond to the level of sex hormones in the blood: at increased estrogen levels the body starts accumulating fat. The synthetic estrogen contained by the hormonal contraceptive pills intensifies fat accumulation. The hormones in hormonal contraceptives relax the walls of veins and increase blood coagulation, thus contributing to clot formation. Expanded veins impair blood drainage to the heart, and blood flow and metabolism in cells are impaired. Obesity can occur at any age, while cellulite occurs primarily during periods of hormonal change such as puberty, pregnancy, postpartum, premenopausal; and as a result of taking hormonal preparations.
- Rapid weight changes. Following rapid gain or loss of weight cellulite may occur on broad body surfaces. When subject to fasting, the body learns to “save” and store food reserves. Signs of cellulite more often as not tend to intensify during pregnancy. The explanation lies in increased levels of estrogen and progesterone in blood as well as putting on weight. In addition, the fetus puts pressure on the blood vessels, thus impairing blood drainage to the heart. Cellulite may deteriorate also after the childbirth, because it takes time for the hormone levels to stabilize, and new mothers often eat more, thus contributing to weight gain.
- Clothing. Young women should avoid wearing too tight jeans that also hinder blood circulation.
- Digestive problems, which often go hand in hand with bad eating habits.
- Stress. Under stress, the body produces the hormone adrenaline which narrows the peripheral blood vessels and impairs microcirculations. This increases muscle tension, hindering the circulation of blood and lymphatic fluid.

All the above listed causes can affect the type and stage of cellulite, each having its own signs of manifestation.

### ***Types and stages of cellulite.***

We distinguish between there main types of cellulite:

- Ø **Oedematous** cellulite. Lower limbs increase in size – the hip, thigh and food area. Increased water and lymphatic fluid accumulation in tissue is typical; skin in problem areas looks rough, however, rather bloated than flabby.
- Ø **Fibrosclerotic or hard** cellulite. Characterised by ruptured structure of collagen and elastic fibres which have become hard, rigid and thick. Cellulite dimples are dense, hard and sensitive. This type is more common in young women, who have good muscle tone; stretch marks are typical.
- Ø **Soft** cellulite. Characterized by weak connective tissue and muscle hypotonia, more frequently in women lacking physical activity. This is a type of cellulite that is hard to treat. Vascular asterisks and varicose veins are common. Frequently appears after by

serious weight loss or childbirth.

The fourth type may be singled out optionally:

Ø **Combined** cellulite, characterised by different signs in different parts of the body.

### ***Stages of cellulite.***

**1st stage.** Skin is even and smooth, without any changes in colour. This stage is sometimes called the stage of a “model”, because the relief of skin can be discerned only in a very strong light. As to bruises and hematomas, it would take longer to heal. Lymph stasis in subcutaneous adipose tissue. For diagnosing it is recommended to use thermographic films.

**2nd stage.** Modifications of skin surface. Chronic lymph stasis and venous stasis. Dimples are more apparent at muscle tension. Palpitation reveals lower skin temperature in the cellulite-affected area.

**3rd stage.** The surface of skin is rough. Blood circulation impaired in subcutaneous adipose tissues and water retention increased. Local to diffuse fibrosis. Micronodules can be palpitated. Lower skin temperature in the cellulite-affected area; pressing on separate areas can hurt. Vascular problems arise – vein network becomes visible.

**4th stage.** Encapsulated distorted nodes of fat cells are well visible; distinguished loss of skin elasticity; poor blood circulation, the surface of skin is coarse and rough, cold at touch and hurts when pressed. Micronodules have merged into macronodules. Macronodules are also known as “black holes”.

## ***LYMPHATIC SYSTEM***

Lymphatic system is closely linked with circulatory system both anatomically and physiologically. **The lymphatic system** consists of lymphatic vessels and lymphoid organs.

Basic functions of the lymphatic system:

- 1) Lymphatic system siphons off the excessive tissue fluids and returns it back to the blood stream.
- 2) Lymph capillaries absorb fat in the villi of small intestine and transport it to the blood stream;
- 3) The lymphatic system helps protect the body against disease.

Lymph and lymph capillaries.

**Lymph** is a yellowish, clear liquid, which runs in the lymphatic system.

Lymph originates from the blood plasma penetrating through the thin capillary walls. Intercellular fluid is formed. The intercellular fluid formation process is called filtration. As a rule, it takes place in the arterial end of the capillary. At the venous end of the capillary, intercellular fluid is absorbed back into the blood stream. The part of liquid that does not manage to be absorbed by the venous capillaries is channelled to lymph capillaries. The intercellular fluid, now in lymph capillaries, is called lymph. Consequently, lymphatic system helps the intercellular liquid to get

absorbed back into the blood stream.

2-4 litres of lymph are generated daily that enter the circulatory system. Adequate circulation of lymph in the body is vital. If it is less than adequate, intercellular fluid retention in tissue occurs. This condition is called oedema.

**Lymph capillaries** are the minutest vessels of the lymphatic system. They are where the lymphatic system begins, and they are located in all body tissues. Lymph capillaries are microscopic in size, and one end is closed. Capillary wall is built of a special epithelium which easily passes through the intracellular fluid.

### **Lymphatic vessels.**

The small lymph capillaries connect with each other creating lymphatic vessels. The walls of lymphatic vessels and veins are similar in structure. There are valves in the walls of lymphatic vessels that prevent lymph from flowing back. Thus lymph flows in one direction only – from the tissues into the blood stream.

All lymphatic vessels connect with each other until there are two large lymphatic vessels. Those, in turn, flow into the venous angles; as a result, the lymph from lymphatic system flows into the overall circulatory system.

The lymph flow in vessels, similar to the flow of blood in veins, is ensured by muscle contractions, bowel movements and other body movements.

### **Lymph nodes.**

Lymph is filtered through the lymph nodes in the lymphatic route. Lymph nodes are small, oval-shaped formations. On the outside, they are embraced by a connective tissue capsule, but in the inside there are several small cavities through which lymph flows, and which contain lymphocytes and macrophages.

In the body, lymph nodes are arranged in clusters. The key lymph node clusters are located in:

- Lower extremities: popliteal and inguinal lymph nodes;
- Upper extremities: elbow and auxiliary lymph nodes;
- Thoracic lymph nodes;
- Cervical lymph nodes,
- Pelvic lymph nodes.

All lymph coming from the lower extremities is filtered through the inguinal lymph nodes. Conversely, the lymph coming from arm is filtered through the auxiliary lymph nodes etc.

Lymph nodes contain lymphocytes in large quantities. They also contain macrophages. Macrophages purify lymph from infectious agents or other foreign bodies, while lymphocytes capture alien protein and generate immune response to them.

**Lymphatic tissue.** Lymphatic tissues are:

- tonsils,
- spleen,
- thymus gland,
- lymphatic tissue in the small intestine.

Although the lymphatic system is indispensable in protecting the body, it also has adverse aspects. If a human body has developed a malignant tumour (cancer), the lymphatic system spreads metastases throughout the body.

Lymphatic system drainage has a key role in anti-cellulite treatment. Massage, as a

technique, helps to alleviate the oedema and facilitates avoiding fluid retention. It has an overall steadying effect; toxins and impurities are eliminated, thus directly facilitating weight loss and improving well-being: fatigue disappears and vigour returns. Cell regeneration is activated, tissues are decontaminated, blood circulation increases, lymph flow improves and venous stasis reduces. Lymphatic drainage has a relaxing effect: muscles are relaxed and the nervous system becomes more balanced. The health of our body directly depends on the proper functioning of the lymphatic system.