

8 Medical Therapy

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Introduction

The term cellulite is often used improperly to define clinical and morphological ailments. In fact it would be correct when talking about this syndrome to distinguish between localised adiposity (AL) and edemato-fibro-sclerotic pannicolopatia (PEFS). Localised adiposity should be considered a female secondary sexual characteristic, which in general does not require therapeutic treatment except in the case of excessive growth (hypertrophy or hyperplasia). Whereas PEFS is a degenerative process of the subcutaneous fatty tissue as a consequence of a localised microangiopathy of the lower limbs with the formation of edema and subsequent fibro-sclerotic evolution. It often runs in families mainly due to chronic venous-lymphatic insufficiency. It may be worsened or sparked off by many conditions such as being Caucasian, postural alterations resulting from alterations of the rachis and lower limbs, overweight and obesity, incorrect diet, some endocrinopathies (hypothyroidism, hyperthyroidism, micropolycystic ovary syndrome) [1,2] alterations of the alimentary tract, alterations of the intestinal bacterial flora, mood swings with alterations of food intake, reduced physical exercise, taking hormones (estro-progestinic), smoking, constipation and wearing tight clothing. It is in any case a chronic disease that may evolve into a phlebolympopathy and therefore requires adequate and prompt remedies. Cellulite, despite its frequent misuse as a term, may be classified into various clinical forms: the adipose, edematous, mixed (adipo-edematous), edematous-adipose, fibrous, sclerotic and fibro-sclerotic types [3]. It is also important to distinguish cellulite from various diseases and/or syndromes which have clinical characteristics that are very similar to those of cellulite. Among these are lipo-edema, lymph edema, phlebedema, phlebolympohedema, lipolympohedema, cyclical edema, localised adiposity, various syndromes (Barraquer-Simmons, Vilain, Dercum, Whipple, Weber-Christian), lipomatosis, lipodystrophy, lipolympohedema of the ankle and dermatological diseases such as pigmentation. A special mention should be given to lipoedema as a syndrome with an as yet unknown etiology, characterised by the deposit of fat in the subcutaneous tissue often associated with the appearance of edema in the erect position localised on the legs and buttocks. Lipoedema unlike lipolympohedema, always starts from the legs and does not affect the feet or ankles. It is not affected by weight and may run in families. This is a very common ailment in which the appearance of the edema is the consequence of the deposit of fat in tissues revealing an endocrine-metabolic disorder of the interstitial matrix and is not accompanied by obesity or overweight. In this case the edema is the result of an altered distance ratio between the adipose cell and the connective structure with consequent loss of support. This type of edema tends to worsen with deambulation and in the erect position. Moreover, an important differential feature compared to the lymph edema is that the lipoedema is soft when touched with possible folding of the skin, which does not appear doughy.

Bearing in mind that the disorders illustrated above and cellulite in particular are sometimes characterised by an accumulation of adipose tissue and by inflamed tissue with reduced vascularisation the nutritional therapy of these ailments must aim primarily at the objectives which may be summarised as follows:

1. The preventive aspect to attempt to limit the nutritional factor as one of the causes of the degenerative disease;
2. The correction of overweight as one of the causes or as the trigger;
3. Moreover, given that in these disorders and in cellulite in particular there is an increase of phlogistic factors and hypo-vascularisation of the tissues, the nutritional approach should, as far as possible, try to improve tissue trophism and blood flow.

To reach the three above objectives it is our conviction that a nutritional approach should be used with a low insulinemic stimulus, moving from a quantitative concept (diet = fewer calories) to a qualitative concept (diet = stimulus or decrement of some hormones essential for health).

The idea of pharmacy-nutrition, in other words food seen as a medicine, is thus strengthened as is nutritional endocrinology, that is to say the stimulation using macro nutrients (carbohydrates, fats and proteins) of specific hormonal systems (insulin-glycogeneicosanoids), which may favour or damage the state of health in general and, in the case of cellulite, the worsening of the state of the tissues involved (adipose, connective, interstitial) in the glutei-femoral areas or on the inside of the knee.

Nutritional treatment of cellulite therefore is not just a hypocaloric approach but is aimed at improving the state of tissue trophism and, in particular at preventing and in some cases reducing the tissue phlogosis characteristic of the disease

To conclude, we can set three targets for the efficacious nutritional therapy of cellulite:

1. Correcting overweight and obesity if present;
2. Increasing the blood flow;
3. Reducing inflammation.

The first objective, in other words the correction of overweight and/or obesity, may be reached by means of a reduction of the calorie intake, especially of that deriving from carbohydrates with a high glycemic index, in other words those carbohydrates which raise blood sugar levels with a consequent increase in levels of insulin.

The other two objectives may be reached by means of a balanced diet of carbohydrates, proteins and fats through a diet that is rich in fruit and vegetables, lean meat, fish and monounsaturated fats such as olive oil. It has become not only important to choose healthy foods now, but also to avoid substances contained in foods, such as hydrogenated fats, inter-esterified oils, monosodium