

POSTURAL REBALANCE IN PREVENTION AND CARE OF PEFS PROBLEMS

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Abstract

Some authors mention the osteoarticular alterations among the possible causes of pefs, but the role of posture in the etiopathogenesis of pefs and an aspect, to date, still little investigated.

Posture derives from the latin *positura* or *position*, thus indicating the position of the body, its shape, the spatial organization of individual parts of the body and how they relate to each other.

The system is managed by the postural tonic system, composed of a series of structures that reside in the SNC and PHERIPHERAL and designed to react to stimuli by adapting the posture to allow the body to continue to function without pain.

The objective of this study is to demonstrate how rebalancing a postural alteration, specifically a rigid diaphragm, can improve a picture of pefs and/or reduce its symptoms.

For this purpose an eight-week program applied to a patient with pefs was used.

The first four- weeks were planned only postural rebalancing, in the next four weeks the work in posture were accompanied by a series of strategies aimed at resolving the specific picture of the patient's pefs.

The degree of cellulite was clinically evaluated with the PAFEG PROTOCOL. The edema was evaluated by examination with *bia* and digital photos were taken for later comparison.

The respiratory pattern and the overall posture of the patient were clinically evaluated using formetric spinometry and a baropodometric examination.

The PH of the urine and the basal metabolism were also evaluated.

The result of the first four weeks showed an improvement in the respiratory pattern, plantar support and posture overall as well as the disappearance of the symptom of heavy legs. No significant changes in the cellulite texture were detected.

Instead of significant than that produced by programs that do not involve postural rebalancing.

The analysis suggests that diaphragmatic stiffness is correlated with a picture of pefs and that if flanked by more specific strategies can enhance/amplify the effects

Keywords: *gynoid lipodystrophy, posture, alkaline diet, radiofrequency*

Introduction

PEFS (edematous sclerotic fibrous panniculopathy) is a multifactorial degenerative disease that affects the adipose layer close to the dermis, completely altering the connective tissue, with possible involvement of the deeper adipose layer.

Correlates positively with:

-the gynoid byotype: Women who have more estrogen and progesterone than androgen hormones and have a large reserve of fat in the lower limbs.

-with excess fat or high BMI values

Is characterized at the level:

-histological from exudation, lipodystrophy and fibrosis.

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-clinic from non-inflammatory thickening of the subepidermal layers, sometimes painful manifested in the form of nodules or plaques of different sizes and positions.

-Aetiopathological by reactive process of SFA (amorphous fundamental substance) associated with microcirculatory deficit, accumulation of hyaluronic acid.

The causes of PEFS are different and not yet fully explored. Among these:

-The constitutional biological factor

-Estrogens that cause an increase in capillary permeability and a decrease in venolymphatic tone

-Interference in the mechanism of contraction of the first lymph

-High protein concentration

-alteration in the anchorage fibers

-Nutrition

-sedentary lifestyle

-The use of hormones

-Tobacco and alcohol

-Stress

-Oxidative stress (cascades of response to oxidative stress)

-osteoarticular alterations

The stages of cellulite are (according to Guirro, 2001):

-Stage 1 edema

-Stage 2 edema gel

-Stage 3 fibrosis

-Stage 4 and 5 advanced fibrosis and sclerosis

PEFS is characterized by the suffering of one or both systems that take on the task of absorbing the

excess liquid present in the interstitial level: the venous and lymphatic systems.

The malfunction of the former produces a venous oedema with a low protein content, the malfunction of the latter produces a lymphatic oedema with a high protein content.

Factors that can favour/obstacle the functioning of the microcirculation are:

-The muscular contraction, because the muscular pump of the lower limbs determines the displacement of the liquids in a centripetal sense.

-physical exercise, because it induces a sympathetic stimulation that produces a vasoconstriction that at the venous level decreases the volume by increasing venous pressure.

-The decrease in vascular oncotic pressure, due to a lowering of the concentration of proteins in the blood, often linked to diets with very low protein content.

-The increase in interstitial osmotic pressure, due to an excess of proteins or solutes at the interstitial level.

-A correct footplate support, because in this way the pressing of the footplate pump is correctly activated

-The variation of abdominal pressure: a functional diaphragm that maintains an optimal excursion of movement creates, during the expiratory phase, a negative abdominal pressure that favours the venous return.

In recent years some authors have begun to mention osteoarticular alterations among the possible causes of PEFS.

Others have gone a little further by stating that the localization of cellulite in some areas (e.g. medial knees) is not random but is related to the presence of an alteration in the postural trim of that joint.

Methods

Clinical case: 41 year old woman with grade 3 PEFS and recurrent symptoms of heavy and swollen legs.

A clinical evaluation of PEFS with PAFEG PROTOCOL (validated) was made, which also includes an evaluation of oedema with BIA AKERN and digital photos using GLCM MATRICES (software image j1.45 for subsequent comparison.

The posture was evaluated as a whole and specifically the respiratory pattern. The morphology of the trunk was detected using a formetric spinometry and the plantar support in statics and dynamics was evaluated with a baropodometric examination.

The PH of the urine with EDGE (multiparameter of the hanna instruments) and the basal metabolism with calorimeter fit mate by cosmed were also evaluated.

In addition, an evaluation of the localisation of subcutaneous fat with plicometry was made.

The patient followed the following program:

1) For the first four weeks a program lasting one hour twice a week:

-myofascial diaphragm treatment

-diaphragmatic respiration in decompensated global elongation

2) For the next four weeks a program of this kind:

-Treatment with RADIOFREQUENCY (tecar Indiba) once a week to approach signs of ptosis present more clearly on the area of the right buttock subplate.

-Physical exercise appropriate to the degree and the type of PEFS of the patient.

-The training session opened with fifteen minutes of postural rebalancing, to continue with the prescribed exercise and end with 20-30' of self-induced lymph drainage.

The total duration of the exercise is one hour and thirty/one hour and forty, three times a week.

-Diet slightly low-calorie at the level of its basal metabolism (the patient was sedentary), alkaline (previously followed an acid diet: the ph of urine was 5) and with a protein quota redesigned more appropriately (1,2 grams per kg of ideal body weight. The diet that followed before was hyper-protein: about 3 grams of protein per kg of body weight).

The subdivision of macronutrients was: 45% carbohydrates, 25% proteins, 30% lipids.

She assumed 2,5 kcal per kg of ideal body weight. No kind of supplements was used.

Results

The check after the first four weeks showed up:

-Insignificant changes in cellulite texture to clinical evaluation

-Improved, instead, the respiratory pattern, the plantar support and the morphology of the trunk

-Almost disappeared the symptom of swollen and heavy legs.

The check after the next four weeks has, instead, highlighted:

-Cellulitic texture significantly changed as well as the aesthetic profile and the ptosis

-Discrete decrease in subcutaneous fat in the retrochanteric (meno 2 cm) and suprapatellar (meno 1 cm) area

-Due kg body weight loss

Discussion

The objective of the study is to demonstrate how rebalancing a postural alteration, specifically a rigid diaphragm, can improve a picture of PEFS and/or reduce its symptoms.

Case analysis suggest that it's plausible to think:

-That an alteration of the respiratory pattern (in the guise of a diaphragmatic rigidity) may aggravate a picture of PEFS

-And that not including the treatment of the diaphragm (where necessary) would reduce the benefits of others strategies more specific to PEFS.

References

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Correlation between lumbar lordosis angle and degree of gynoid lipodystrophy in asymptomatic woman