

# Lipo-lymphoedema and idiopathic cyclic oedema

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## Abstract

*The case of a 56-year-old patient suffering from morbid obesity associated with lymphoedema of the lower limbs is reported. A clinical diagnosis of idiopathic cyclic oedema and stage II lipo-lymphoedema was made, characterized by hardened oedema which was irreversible during resting, and the presence of varicosities in the lower medial third of the limbs. The limb circumferences were measured. Lymphatic drainage was chosen as treatment for 15 days, which led to a reduction in the circumference of the limb. After this, the patient missed treatment for about 15 days and again presented with an increase of the oedema, but this increase improved with rest. An Unna boot was chosen due to the difficulty of using contention stockings or bandages. The association of the Unna boot accelerated the reduction of the oedema.*

*In conclusion, the differentiation between lipoedema and lipo-lymphoedema is difficult, so a successful treatment was achieved with the association of several therapies, including the use of a multidisciplinary health-care team.*

**Key words:** lipo-lymphoedema, lipoedema, lymphoedema, obesity, treatment

## Introduction

Lipoedema is a clinical syndrome that was described for the first time by Allen and Hines in 1940 [1]. It is a chronic disease that mainly affects female patients and is characterized by a symmetrical bilateral increase in the fatty tissue at the hips and legs associated with a tendency of orthostatic oedema [2, 3].

In the majority of cases lipoedema appear after puberty when the hips and thighs show evident signs. When the lymphatic system is not involved, the feet are normal and the Stemmer sign is negative [4, 5].

Idiopathic cyclic oedema syndrome was identified in 1955 by Mach and is characterized by a set of clinical conditions related to vascular hypermeability accompanied by oedema caused by interstitial retention of fluids [6].

The aim of the current study was to discuss the diagnosis and treatment of lympho-lipoedema and idiopathic cyclic oedema.

## Case report and discussion

The case of a 56-year-old female patient with morbid obesity associated with lipo-lymphoedema of the lower limbs and idiopathic cyclic oedema is reported. Diagnosis of lipo-lymphoedema was clinical, characterized by hardened oedema which was not reversible with rest, and the presence of cellulitis, verrucosities in the lower medial third of the legs and oedema of the feet with a positive Stemmer sign (**Figure 1**).

Diagnosis of idiopathic cyclic oedema was also clinical, characterized by general oedema, mainly of the hands and face. This was first identified in the morning

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**Figure 1.** Aspects of the lower limbs with lipo-lymphoedema, highlighting the oedema of the feet and the skin lesions

and improved during the day, although the oedema of the lower limbs that appeared worsened during the day. The patient reported that she had suffered from this condition for more than ten years.

The patient was thin during her youth and has no history of lipoedema in the family. Measurements of the circumference of the limbs were made, with the exception of volumetric measurements due to the difficulties the patient had in moving. Lymph drainage was performed for a period of 15 days leading to a reduction in the circumference of the limb and a decrease in the oedema. The patient missed treatment sessions for about 15 days and an increase in the size of the legs was seen, but this deterioration improved with rest. Because of the difficulties involved with using stockings and bandages, an Unna boot was utilized. The Unna boot allowed the compression mechanism necessary for this treatment and imposed the correct use by the patient.

In this study, it is necessary to remember that the patient did not have a history of familial lipoedema. However, the chronic idiopathic cyclic oedema over a period of more than ten years is important. In this case we must ask if the physiopathology of the lipo-lymphoedema is not due to the evolution of the idiopathic cyclic oedema.

Some cases of evolution of idiopathic cyclic oedema to clinical lymphoedema have been identified in patients with ideal body mass indexes.

This fact reinforces the hypothesis that the cause of the lymphoedema in this patient is an evolution of idiopathic cyclic oedema and gives doubt in relation the diagnostic of the lipoedema.

## References

1. Allen E V, Hines E A, Lipoedema of the legs (1940) A syndrome characterized by fat legs and edema. *Proc Staff. Meet Mayo Clinic*, 15: 184.
2. Amann-Vesti BR, Franzeck UK, Bollinger A (2001) Micro-lymphatic aneurysms in patients with lipedema. *Lymphology*, 34: 170–175.
3. Boursier V, Pecking A, Vignes S (2004) Comparative analysis of lymphoscintigraphy between lipedema and lower limb lymphedema. *J Mal Vasc*, 29: 257–261.
4. Kaiserling E (2002) Morphologische Alterationen. In: Foeldi M, Kubik S (eds) *Lehrbuch der Lymphologie*. Urban & Fische, 2002.
5. Godoy JMP, Godoy MFG, Hayashida M (2005) Lipoedema and varicose vein surgery: A worse prognosis? *Acta Angiol*, 11: 186–187.
6. Mac R, Fabre J, Mullera J, NehernR, Borth R (1955) Oedeme idiopathique par rétention avec hyperaldostérone. *Bull Soc Méd Hop, Paris*, 106: 726–736.