Facial lymphedema: a challenging diagnosis

Case Report

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ABSTRACT

Introduction: Lymphedema is a chronic, multifactorial condition that can lead to significant health impacts, including functional impairments, activity limitations, and reduced quality of life. Midline lymphedema, such as that affecting the face or genitalia, is relatively rare. This case report describes a patient with residual facial lymphedema following episodes of cellulitis.

Observation: A 48-year-old woman presented with persistent asymptomatic left hemifacial edema that had developed over four years. Her medical history included two episodes of orbital cellulitis treated with oral antibiotics, which improved pain but did not resolve the swelling. Clinical examination revealed painless, rubbery edema affecting the upper lip, cheek, and eyelids, leading to aesthetic discomfort. Diagnostic imaging suggested soft tissue infiltration, and secondary facial lymphedema was diagnosed. Although manual lymphatic drainage and good skin care were recommended, these interventions showed limited effectiveness.

Conclusion: Lymphedema remains a chronic, incurable condition requiring lifelong management. Effective treatment, including strict adherence to compression therapy, is crucial for alleviating symptoms and improving quality of life. The persistence of symptoms despite standard treatments underscores the need for ongoing research into more effective management strategies.

Key Words: Lymphedema, face, diagnosis, treatment .

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INTRODUCTION

Lymphedema is a complex, chronic condition with multiple underlying causes that can lead to a range of symptoms and issues. These symptoms can affect various aspects of health, including impairments in bodily functions and structures, limitations in daily activities, and restrictions in participation. Consequently, lymphedema often causes significant distress and a reduction in quality of life [1]. Midline lymphedema, such as that affecting the face or genitalia, is unfortunately rare. We report here a case of a patient with residual facial lymphedema following episodes of cellulitis.

OBSERVATION:

A 48-year-old woman consulted for an asymptomatic left hemifacial edema evolving over four years. Her medical history revealed two prior episodes of orbital cellulitis, which were treated with oral antibiotics, resulting in pain improvement but persistent swelling. There was no history of neoplasia or radiotherapy in the cephalic region. Upon clinical examination, a painless, rubbery left hemifacial edema with normal skin color and temperature was observed, affecting the upper lip, cheek, lower and upper eyelids, leading to dermatochalasis causing aesthetic discomfort, her main reason for consultation (Fig. 1). No lymphadenopathy was noted, and the rest of the examination was unremarkable. Her infectious workup yielded negative results, and a facial soft tissue CT scan suggested soft tissue infiltration without distinct collection. We concluded with a diagnosis of secondary facial lymphedema. Manual lymph drainage and good skin care and hygiene were recommended to the patient.

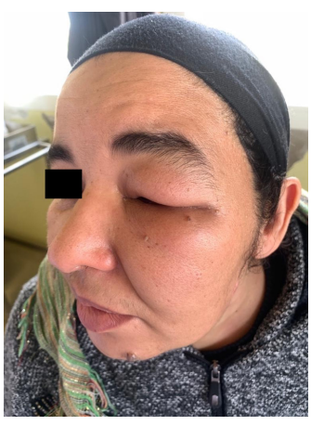

Figure 1: Clinical image showing left hemifacial lymphedema

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DISCUSSION

Lymphedema is a chronic condition resulting from an accumulation of protein-rich fluid in the interstitium and fibroadipose tissue, exceeding the lymphatic drainage capacity [2]. It is classified into two categories: primary or secondary.

Facial lymphedema can be caused by primary conditions, which are often congenital or genetic in nature. Primary lymphedema includes genetic disorders such as lymphatic malformations or congenital lymphatic dysplasia, where the lymphatic system is underdeveloped or malformed from birth. Another primary cause is Meige's disease, a type of primary lymphedema that can affect the face and other areas, typically manifesting in childhood or adolescence [3].

Secondary facial lymphedema arises from acquired conditions that disrupt the normal flow of lymphatic fluid. Common secondary causes include trauma or surgical interventions, particularly those involving the head and neck, which can lead to lymphatic vessel damage or removal of lymph nodes. Radiation therapy for cancer treatment in these areas can also impair lymphatic function [4]. Other contributing factors are infections and inflammatory conditions such as cellulitis, erysipelas, rosacea (Morbihan syndrome) are usual responsible [5]. Systemic diseases like congestive heart failure or kidney disease can also lead to fluid retention and facial swelling.

Facial localization not secondary to surgery and/or radiotherapy of the cephalic region is rarely reported. Lymphoscintigraphy of the face following the injection of 99mTc-labeled colloids is a simple and highly valuable method for diagnosing facial lymphedema and assessing the lymphatic drainage pathways of the face [6]. Unfortunately, this procedure was not performed on our patient due to its unavailability. Treatment with therapeutic compression and manual lymphatic drainage has demonstrated efficacy in patients with residual lymphedema following surgery and/or radiotherapy for neoplasia [7].

CONCLUSION:

In conclusion, lymphedema is a diagnostic challenge. There is no cure for lymphedema, and treatment is lifelong. Depending on the affected extremity, the condition can impact function and quality of life. Rigid adherence to compression stockings is mandatory to achieve relief from pain and swelling.

CONFLICT OF INTEREST

the authors declare that there are no conflict of interest.

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