International Journal of Innovative Research in Medical Science (IJIRMS)
Volume 10, Issue 05, May 2025,
https://doi.org/10.23958/ijirms/vol10-i05/2070

Case Report

Lymphedema After Covid-19: Case Report of a Patient with a History of Mastectomy Who Remained Asymptomatic for 35 Years

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Received: 23 April 2025; Accepted: 11 May 2025; Published: 15 May 2025

Abstract

This paper reports on a case of upper limb lymphedema 20 days after the diagnosis of Covid-19 in a patient with a history of mastectomy who had remained asymptomatic for 35 years. The medical assessment revealed lymphedema, with no history of infection, trauma, physical effort or any other triggering factor of edema. Multisegmented bioimpedance performed with the InBody 10 equipment confirmed lymphedema in the left limb (2.65 liters in left limb vs. 2.06 liters in right limb).

Keywords: ***Covid19, mastectomy, lymphedema Upper limb.***

Introduction

Lymphedema is the accumulation of lymphatic fluid due to deficient drainage and may be primary or secondary [1]. Lymphedema can occur after treatment for breast cancer (surgical and/or adjuvant therapies) [2].

Covid-19 is an infectious disease with global importance due to the number of cases and deaths since its emergence in 2019 [3]. Covid-19 can cause severe respiratory failure as well as vascular problems, such as deep vein thrombosis and pulmonary thromboembolism [4]. Some variants of SARS-COV-2, such as P.1, are associated with a greater incidence of deep vein thrombosis [5].

Many of the complications related to infection by SARS-COV-2 are related to the consequent immune-mediated process that results in an exacerbated systemic inflammatory process [6]. Uncontrolled inflammation can lead to lymphatic dysfunction [7]. This paper reports a case of upper limb lymphedema 20 days after the diagnosis of Covid-19 in a patient with a history of mastectomy who had remained asymptomatic for 35 years.

Case report

A 62-year-old patient who has been submitted to mastectomy as well as chemotherapy and radiotherapy and had remained asymptomatic for 35 years presented progressive edema in the upper limb ipsilateral to the mastectomy 20 days after infection by SARS-COV-2. The medical assessment revealed lymphedema, with no history of infection, trauma, physical effort or any other triggering factor of edema. Multisegmented bioimpedance performed with the InBody 10 equipment confirmed lymphedema in the left limb (2.65 liters in left limb vs. 2.06 liters in right limb). Initial clinical treatment comprised diosmine + hesperidin 1.0 g twice per day and a return visit after one month for reassessment. The study was approved Ethical Committee Faculdade de Medicina de Sao Jose do Rio Preto-FAMERP-Brazil# 012604/2025. All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee(s) and with the Helsinki Declaration. Written informed consent was obtained the patient for publication of this case report included

Discussion

The present study reports a case of the emergence of lymphedema 35 years after mastectomy and axillary clearance in a patient who had remained asymptomatic for 35 years. Two weeks after infection by Covid-19, the patient presented edema in the left upper limb with no history of other aggravating causes of lymphedema. The literature on cases of this type is scarce.

Patients submitted to mastectomy with axillary clearance are classified with subclinical lymphedema, which may or may not progress to lymphedema. Aggravating factors, such as erysipelas, trauma or improper exercises, can lead to lymphatic decompensation and edema. In the present case, the only aggravating factor was infection by Covid-19, which the patient contracted despite having taken two CoronaVac vaccines and one AstraZeneca vaccines.

Although the main symptoms are related to the respiratory system, vascular impairment related to Covid-19 has been reported, especially pro-thrombotic events, and lymphatic symptoms have been described, such as edema and greater difficulty in controlling preexisting lymphatic conditions.

Infectious processes, such as Covid-19, which increase the systemic inflammatory response, have been described, with direct and indirect impact on the lymphatic system. However, further studies are needed on the direct effect of Covid-19 on the lymphatic system. The study shows changes in the pathophysiology of viral variants of Covid-19 with a significant reduction in thrombotic events but need more study for better compression of Covid-19 and her alterations [8].

Declarations

Ethics approval and consent to participate

The study was approved Ethical Committee Faculdade de Medicina de Sao Jose do Rio Preto-FAMERP-Brazil# 012604/2025. All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee(s) and with the Helsinki Declaration. Written informed consent was obtained by the patient for publication of this case report.

Data Availability

The data used to support the findings of this study are included within the report.

Conflicts of Interest

The authors declared no have conflict interest.

Funding Statement

The authors declared no financial support for study.

Authors contribution

Conception and development of the study: Godoy JMP, Godoy ACP, Godoy HJP
Analyze and interpret dates: Godoy JMP, Godoy ACP, Godoy HJP
Data collection: Godoy JMP, Godoy ACP, Godoy HJP
Article writing: Godoy JMP, Godoy ACP, Godoy HJP
Critical review of the text: Godoy JMP, Godoy ACP, Godoy HJP
Final approval of the article*: Godoy JMP, Godoy ACP, Godoy HJP
General responsibility for the study: Godoy JMP, Godoy ACP, Godoy HJP

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