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# LYMPHATIC THERAPY BY GODOY METHOD IN THE TREATMENT OF DYSPNEA AFTER COVID- 19: CASE REPORT

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**Key words:** dyspnea, sequela, COVID-19, Godoy method<sup>®</sup> **Ключові слова:** задишка, наслідки, COVID-19, метод Годой **Ключевые слова:** одышка, последствия, COVID-19, метод Годой

Abstract. Lymphatic therapy by Godoy method in the treatment of dyspnea after COVID- 19: case report. Jose Maria Pereira de Godoy, Livia Maria Pereira de Godoy. Despite all efforts, this disease has been a major cause of mortality as well as sequelae after the infectious event. Issues regarding an effective form of treatment for the virus have led to efforts focused on the acute manifestations of the disease. The aim of the present study is to describe the first observational result of the treatment of a pulmonary sequela of COVID-19 with important symptomatic limitations. One month ago, the patient contracted COVID-19 and was treated clinically, but the case progressed with important respiratory and physical limitations. An increase occurred in the lymphedema and the patient sought treatment. She would waken at night with dyspnea and was unable to walk more than a few steps or climb stairs. Intensive treatment of the lymphedema was proposed using the Godoy Method®. The Godoy method for reversing fibrosis was useful in improving dyspnea in a short period of time in a patient with sequelae resulting from COVID-19.

Реферат. Лімфатична терапія методом Годой у лікуванні задишки після COVID-19: випадок з практики. Хосе Марія Перейра де Годой, Лівія Марія Перейра де Годой. Незважаючи на всі зусилля, ця хвороба була основною причиною смертності, а також спричиняла наслідки після інфекції. Серед питань щодо ефективної форми лікування вірусу чимало уваги й зусиль викликають гострі прояви захворювання. Метою цього дослідження є опис першого результату спостереження за лікуванням легеневих наслідків COVID-19 з важливими проявами клінічних симптомів. Місяць тому пацієнтка захворіла на COVID-19 і проходила клінічне лікування, але хвороба прогресувала із серйозними дихальними та фізичними обмеженнями. Виникло збільшення лімфедеми, і пацієнтка звернулась за лікуванням. Пацієнтка прокидалася вночі від задишки і не могла пройти більше кількох кроків або піднятися по сходах. Запропоновано інтенсивне лікування лімфедеми за методом Годой®. Метод Годой для реверсії фіброзу був корисним для поліпшення задишки за короткий період часу в пацієнта з наслідками, спричиненими COVID-19.

COVID-19 has posed a considerable challenge to the medical community throughout the world. Despite all efforts, this disease has been a major cause of mortality as well as sequelae after the infectious event. Issues regarding an effective form of treatment

for the virus have led to efforts focused on the acute manifestations of the disease. However, chronic sequelae resulting from damage to essential organs, such as the lungs, heart and kidney, pose additional challenges in this new phase of the disease [1, 2].

#### MATERIALS AND METHODS OF RESEARCH

In recent years, Godoy & Godoy have worked with the treatment of lymphedema in all clinical stages, including elephantiasis, and have shown that it is possible to reverse this condition, enabling the affected limb to achieve normality or near normality. The major characteristic of stage III lymphedema (elephantiasis) is intense fibrosis. Initial studies in the publication phase involving a histological analysis have shown that the reversal of fibrosis is possible [3, 4, 5, 6].

This study was conducted in accordance with the principles of bioethics set out in the WMA Declaration of Helsinki – "Ethical principles for medical research involving human subjects" and "Universal Declaration on Bioethics and Human Rights" (UNESCO) and approved Ethical Committee and Research in Medicine School of Sao Jose do Rio Preto-FAMERP number 4.263.924.

The effect of treatment is systemic, as the authors have observed in patients with lymphedema and other associated diseases. The results suggest a systemic response, with the improvement in fibrosis in other regions of the body. As sequelae from COVID-19 can lead to a fibrotic pattern, therapies aimed at the reduction in fibrosis may be useful.

The aim of the present study is to describe the first observational result of the treatment of a pulmonary sequela of COVID-19 with important symptomatic limitations.

Case report.

A 30-year-old female patient with obesity was submitted to bariatric surgery 13 years ago and lost 35 kg. Four years later, she regained approximately 20 kg and four years ago bilateral lower-limb edema was observed. The patient consulted a physician, who sent her to lymphoscintigraphy, which revealed bilateral lower-limb lymphedema. The condition was treated clinically at that time, with elastic stockings and diosmin + hesperidin, but the patient did not adapt to the elastic stocking. She lost weight again dieting.

In this period, the patient had an intestinal infection and became malnourished, improving after being submitted to parenteral feeding. One month ago, the patient contracted COVID-19 and was treated clinically, but the case progressed with important respiratory and physical limitations. An increase occurred in the lymphedema and the patient sought treatment. She would waken at night with dyspnea and was unable to walk more than a few steps or climb stairs. The physical examination revealed bilateral lower-limb lymphedema in clinical stage II and breathing difficulty that even affected her ability to speak.

Intensive treatment of the lymphedema was proposed using the Godoy Method® [3, 4, 5], which

consisted of mechanical lymphatic therapy eight hours a day (device that performs about 28 movements of plantar flexion and extension passively per minute, about 1680 per minute in one hour and about around 13.440 movements in eight hours of treatment) [6], 20 minutes of cervical lymphatic therapy twice per day (technique that performs about 30 skin stretching movements in the cervical region) [4, 5, 7] and the use of bandages on the lower limbs alternating with hand-crafted, laced grosgrain (nonelastic) stockings. On the first day of treatment, the patient exhibited a substantial improvement in the respiratory condition and was able to walk 200 meters without dyspnea. The next day, she walked 600 meters in the morning and 800 meters in the afternoon without dyspnea. The following day, she was able to go up and down three flights of stairs without dyspnea and was discharged. She is currently in outpatient follow-up.

### RESULTS AND DISCUSSION

The present study describes a clinical finding, in which the patient had a clinical improvement in dyspnea, which was a sequela of COVID-19, after eight hours of intensive treatment. COVID-19 has posed a considerable challenge to the medical community. Despite all efforts, this disease has been a major cause of mortality as well as sequelae. The patient described herein had become desperate with her clinical situation, which limited her considerably, and believed that she was not going to survive. The initial result on the first day led to authors to prioritize lymphatic therapy in the region of the thorax.

The Godoy & Godoy method proposes the clinical and histological reversal of fibrosis in all clinical stages of lymphedema and treatment has a systemic effect [8, 9]. Therefore, the hypothesis is that this treatment affected the inflammatory process and fibrosis in the lungs resulting from COVID-19. This finding suggests a therapeutic possibility that may benefit patients with sequelae from COVID-19.

The authors initially found that the method reverses clinical fibrosis and subsequently evaluated the reversal using high-frequency ultrasound. Histological studies have confirmed the result. The effect is systemic, which led the authors to use the treatment for chronic diseases involving inflammatory and fibrotic processes.

This finding for one of the most important sequelae of COVID-19 suggests that the search for therapies aimed at reversing the fibrotic process may be one of the first lines of intervention for these patients. However, a line of research is needed to define the main method for addressing these sequelae.



#### **CONCLUSION**

The Godoy method® for reversing fibrosis was useful in improving dyspnea in a short period of time in a patient with sequelae resulting from COVID-19.

#### **Contributors:**

Godoy J.M.P. – conceptualization, visualization, methodology, investigation, resources, project administration, writing – review & editing, supervision;

Godoy L.M.P. – formal analysis, methodology, investigation, resources, project administration, supervision, visualization, writing – review & editing.

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