

Unconventional Clinical Presentation of COVID-19: A Case Report Highlighting the Absence of Respiratory Symptoms

Maria Julia Castilho Lara Campo, Mariana Boigues Machado, Milena Ferruzzi Ederli, Nicolas Weffort de Oliveira Rossato, Rodrigo Sala Ferro, Guilherme Henrique Dalaqua Grande

Faculty of Medicine, University of Western São Paulo (UNOESTE), Presidente Prudente, SP, Brazil.

Corresponding Author:

Dr. Guilherme Henrique Dalaqua Grande
Email: guilhermegrande@unoeste.br

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Abstract

Background: COVID-19, caused by SARS-CoV-2, presents with diverse manifestations, including both respiratory and non-respiratory symptoms, which can vary among individual patients. **Case Report:** We present a case of a 54-year-old male with a history of diabetes and hypertension who contracted COVID-19. Interestingly, he exhibited no respiratory symptoms despite testing positive for the virus. The patient had recently returned from a seven-day trip to Porto de Galinhas (PE) with his wife. He initially experienced myalgia, arthralgia, fever, and loss of appetite, but did not exhibit any respiratory manifestations. **Conclusion:** This case highlights that COVID-19 can manifest without respiratory symptoms and affect other systems in the body. It underscores the importance of considering non-respiratory symptoms in the diagnosis and management of COVID-19 cases.

Keywords: Atypical Symptoms, Coronavirus Infections, Diagnosis, Myalgia, SARS-CoV-2.

Introduction

The COVID-19 pandemic caused by the highly infectious SARS-CoV-2 virus has posed a global challenge [1,2]. Originating in Wuhan, China in late December 2019, the disease quickly spread throughout the country [3]. COVID-19 exhibits a wide range of manifestations, affecting both the respiratory and non-respiratory systems, which can vary among individuals and may worsen in the presence of advanced age or co-morbidities [4]. While respiratory symptoms such as dry cough, dyspnea, and sore throat, often accompanied by fever above 37°C, headache, loss of taste or smell, and diarrhea, are commonly observed in medical practice, atypical manifestations unrelated to the respiratory system have also been reported in some individuals. These include inappetence, myalgia, abdominal pain, and hypoacusis [5]. It is worth noting that the occurrence of COVID-19

without respiratory manifestations is considered uncommon, as most cases involve symptoms related to the upper and lower respiratory system [6].

This case report aims to present a unique occurrence of a patient infected with SARS-CoV-2 who did not exhibit any respiratory symptoms. By highlighting this unusual presentation, we shed light on the diverse nature of COVID-19 and the need to consider atypical manifestations in the diagnosis and management of cases [6].

Case Report

A 50-year-old married man with a history of diabetes and hypertension, no history of drug use, and incomplete vaccination for H1N1, traveled with his wife to the Northeast region of Brazil in March 2020. They passed through multiple airports, including Presidente Prudente (PPB),

São Paulo (CGH/GRU), and Recife (REC). Three days before returning to their hometown (Day 1 - D1), the patient experienced the onset of myalgia, arthralgia, fever ($>37.8^{\circ}\text{C}$), and lack of appetite. As his symptoms worsened, he sought medical care at the Emergency Room of a private hospital (D9), six days after returning from the trip. The initial hypothesis was dengue, and a blood count was performed, which showed normal patterns, including a platelet count of $168,000/\text{mm}^3$ (Reference values: $150,000\text{-}400,000/\text{mm}^3$). However, the patient was advised to return for a follow-up blood count after 48 hours, following the institution's protocol for dengue. On D11, a new blood count revealed thrombocytopenia (platelet count of $143,000/\text{mm}^3$), confirming the diagnosis of dengue.

On D13, despite the patient's platelet count returning to normal ($153,000/\text{mm}^3$), he and his wife were admitted to the hospital due to their poor general condition. His wife, who had developed worsening symptoms, dyspnea, cough, and a drop in peripheral oxygen saturation, was diagnosed with COVID-19 based on clinical signs and test results. Unfortunately, despite appropriate therapy, she experienced respiratory failure and passed away the following day. As a result, the patient was reassessed, and laboratory, imaging, and naso-oropharyngeal swab tests (real-time RT-PCR for SARS-CoV-2) were requested, even though he did not exhibit respiratory symptoms and maintained oxygen saturation above 95% in ambient air. The real-time RT-PCR test for SARS-CoV-2 came back positive on D31, along with the presence of ground-glass opacity on chest tomography, leading to a conclusive diagnosis of COVID-19.

Throughout his hospitalization, the patient was managed according to the institutional contingency plan for COVID-19 treatment, which included medications such as Ceftriaxone 2 g/day, Azithromycin 500 mg/day, Oseltamivir 75 mg 12/12hrs, Hydroxychloroquine 400 mg: 12/12 hrs on the 1st subsequent day 400 mg/day, Vitamin D,

oxygen therapy, and symptom relief medications based on his clinical condition. To prevent aerosol transmission, the use of resources and aerosol-forming drugs was limited for the medical team's safety.

During his hospital stay, there was a significant change in C-Reactive Protein (CRP) levels, with a peak of 2.25 mg/dL on the 16th day (D16), which gradually regressed and normalized in the last collected exam on D19. As his clinical status improved, along with favorable laboratory and imaging results, the patient was discharged on D20 with instructions for home follow-up and preventive measures. He currently reports no physical discomfort but remains emotionally affected by the worldwide impact and the loss of his wife due to the disease.

Discussion

COVID-19 primarily affects the respiratory system, with typical symptoms including upper and lower respiratory tract manifestations, dyspnea, dry cough, fever ($>37^{\circ}\text{C}$), fatigue, malaise, and headache. Additionally, there have been reports of less common symptoms such as gastrointestinal issues, arthralgia, myalgia, dizziness, and loss of appetite [7]. In this reported case, the patient presented with infrequent symptoms such as arthralgia, myalgia, inappetence, and fever ($>37.8^{\circ}\text{C}$), but without any respiratory manifestations, making his clinical condition atypical for a COVID-19 diagnosis. As a result, due to similarities with dengue and the epidemiological situation in Presidente Prudente, an incorrect assumption of dengue was initially made. Upon reassessment, the patient was eventually diagnosed with COVID-19 based on his wife's diagnosis and the presence of ground-glass opacity observed on chest tomography, which has high sensitivity (97%) but low specificity (25%) in detecting the disease [8]. Real-time PCR testing was also conducted for diagnostic purposes, but there was a delay in receiving the results due to high demand for the test, leading to a 12-day wait.

Although the patient's physical symptoms improved, there were significant emotional and psychological consequences resulting from the experience of dealing with the disease and the mourning context. Studies have shown that individuals suspected or infected with SARS-CoV-2 may exhibit strong emotional and behavioral reactions, which can progress to depressive, anxiety, and psychotic disorders, and in extreme cases, even suicide. The rapid succession of losses, combined with the inability to hold traditional funeral ceremonies, further exacerbates the mental state of those involved [9].

Conclusion

It is evident that atypical or non-respiratory symptoms can indicate the presence of COVID-19. It is therefore essential for healthcare professionals to carefully evaluate clinical findings and conduct appropriate differential diagnoses to minimize the chances of diagnostic confusion and erroneous treatment. Prompt recognition of atypical presentations can lead to early detection and appropriate management of COVID-19 cases, ultimately improving patient outcomes and reducing the potential for further transmission of the virus.

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