Successful management of the first case of SARS-CoV-2 infection in an Iranian HIV patient

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Case Report

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Abstract

There are limited data regarding HIV/AIDS associated-COVID-19 infection. This article reports a case of HIV female with an acute SARS-CoV-2 infection that successfully managed and treated in Iran. This study presents the clinical symptoms, diagnosis, and treatment of this case.

Background

In the late 2019, a pneumonia due to the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) emerged in Wuhan, China, which has immediately spread around the world to become a pandemic problem. The disease has more sequels in >60 years old patients and those who have comorbidities, such as pulmonary diseases, chronic kidney diseases, diabetes, hypertension and cardiovascular diseases.^{1,2} As our knowledge, coronavirus disease (COVID-19) has been reported in HIV patients in Wuhan (61 and 24 years-old males)^{3,4} Shenzhen, China (38-year-old man)⁵, and in Spain (3 males with 49, 29, and 40 years-old and 2 transgenders with 40 and 31 years-old)⁶.

Case Presentation

Here, we present a female case of SARS-CoV-2 infection in a 37-year-old HIV patient. She had infected with HIV through heterosexual transmission (Supplementary Table 1). On 25 March 2020, the patient admitted due to dry cough, headache, fatigue and a mild fever (37.6 °C). Before admission, she went shopping without a mask or protection for the last two weeks. Her first symptom was persistence headache that she reports four days before admission (March 21, 2020) which was followed by a dry cough. She declared that headache was on her forehead. She also reported severe nausea due to her anti-HIV medication side effect. She had no other symptoms such as nasal congestion, runny nose, expectoration and chest tightness, skin symptoms, diarrhea and gastrointestinal problems or smell and taste disorders. She had normal breath with normal respiratory rate, normal pulse and blood pressure at the time of admission. Trend of the patient's symptoms are presented in Figure 1. At the chest CT, the typical appearance of the COVID-19 such as peripheral and bilateral ground-glass opacification (GGO), consolidation and visible intralobular lines (crazy paving pattern) were observed (Supplementary Figure 1). Oropharyngeal and nasopharyngeal swabs sampling were obtained and Real-time PCR was positive based on the N and Orf1b genes. Her CBC and CD4+ T cells counts were normal at the time of admission (Supplementary Figure 2). Due to her good general condition, she was not hospitalized and just followed up at home and treated with Hydroxychloroquine (200mg PO Q12h) and Oseltamivir (75mg PO Q12h). Three days after treatment, her headache was relieved and her severe cough was improved, but a mild cough was continued until the 16th day of infection. The medication continued until the 14th day. On the 16th day, her chest CT was normal and oropharyngeal and nasopharyngeal swab were negative for SARS-CoV2 RNA (Figure 1). The patient condition was stable till now.

Declarations

ETHICS STATEMENTS

Informed consent was obtained from the participant for the publication of this case report.

The study was approved by the Ethics Committee of Jahrom University of Medical Sciences, Jahrom, Iran.

DATA AVAILABILITY STATEMENT:All datasets generated for this study are included in the Supplementary Material.

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Conflicts of Interest: The authors declare no competing interests.

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Figures