

Successful Treatment of Covid-2019 With Ivermectin: A Case Report

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Abstract

With the COVID-19 pandemic claiming millions of lives over three years, the World Health Organization (WHO) has declared that it is no longer a global emergency; however, the disease continues to be a threat to global health. At the same time, there are differences in the treatment protocol approved by health authorities in different countries, and even among doctors in treating cases. Regarding the use of ivermectin in the treatment of coronavirus, it has been approved by the WHO in clinical trials. In this article we report the treatment case of a young man who became infected while working in an isolation hospital treating COVID-19 cases. He made a full recovery after taking ivermectin under medical supervision. We hope that with this case report and others, practitioners will be better able to manage COVID-19, avert potential problems, and save lives.

Keywords: SARS-CoV-2; management; antiviral; antihistamines

Introduction

The WHO declared the end of the COVID-19 pandemic as an emergency, but it still poses a threat to global health [1]. This entails trying to find an effective treatment for new cases that may appear in the future. Several clinical trials using available drugs to treat COVID-19 patients have been investigated. Among these drugs, ivermectin has been previously used as a safe drug to treat several parasitic and skin diseases including filaria and scabies has been suggested to be effective as a prophylaxis and treatment for the early stages of COVID-19 infection [2]. This use is built on previous reports indicating the broad-spectrum antiviral properties of ivermectin [3]. Furthermore, a large study concluded that regular use of ivermectin significantly reduces the incidence of COVID-19 as well as hospitalization and mortality rates [4]. Despite the apparent effectiveness of ivermectin as an antiviral drug in previous studies, the WHO has not yet approved its use in combating the current pandemic, but recommends its use in clinical trials only [5].

Case Report

The case concerns a 29-year-old doctor working in a specialized isolation hospital to isolate and treat COVID-19 cases at Zagazig University Hospitals in Egypt. He was suffering from a sore throat accompanied by sharp pain, headache, stuffy nose, frequent sneezing and coughing, tinnitus, shortness of breath, general fatigue and muscle aches. He was a non-smoker; and had no other special habits. He was not vaccinated against COVID-19 until the time of infection. None of his family members contracted the coronavirus. His body weight was of an average value. Past medical history and general health were free of chronic diseases such as diabetes mellitus and hypertension. Physical examination revealed an elevated body temperature of 38.5°C, heartbeat of 85/min, and blood pressure of 130/85 mmHg. General and local chest examinations were without important clinical findings. He was then investigated by nasal swab PCR test which revealed a positive case of COVID-19. Random blood sugar and complete blood count (CBC) were within normal values.

Once the COVID-19 diagnosis was confirmed, he was immediately isolated in the hospital under medical supervision. Then, the course of treatment was initiated in addition to bed rest and plenty of fluids. Treatment included 4 tablets (each containing 6 mg) of ivermectin, as a single dose on an empty stomach for 4 consecutive days. This was concomitant with antihistaminic, antipyretic and nasal decongestant tablets before bed for 10 days. The protocol for the use of ivermectin was carried out under the supervision of an experienced pulmonologist.

The majority of the symptoms and indicators had subsided within 10 days, except for a moderate headache that got better over time. The nasopharyngeal swab for COVID-19 also turned out to be negative. The patient was delighted with the treatment, which relieved his discomfort and symptoms without reporting any side effects.

Discussion

COVID-19 is a multi-organ disease; delay in its treatment may lead to immunosuppression especially in patients with comorbidities with the development of serious secondary fungal infections such as mucormycosis [6]. In this index case, the treatment protocol was initiated as soon as the diagnosis was confirmed.

Ivermectin was the main component as an antiviral used in the treatment of the current patient. In this regard, the clinical trial was registered in May 2020 for the use of ivermectin to combat the pandemic [7]. It revealed effectiveness in protecting individuals who are in close contact with patients [2]. Although ivermectin has not yet been approved by the WHO for the treatment of the current coronavirus, some authors have suggested its use, in addition to the use of vitamins C and D and zinc [8]. We concur with a previous study that shows ivermectin has a high efficacy in the early stages of the disease with rapid symptom recovery [9]. We are also in agreement with Khan and colleagues that ivermectin appears to reduce the disease's course advancement in COVID-19 patients in this aspect [10]. However, the findings in the present case are inconsistent with another study stating that the use of ivermectin with inpatient COVID-19 is not recommended because it does not affect mortality or length of hospital stay among survivors [11]. This difference might be attributed to the different ways in which ivermectin was used. In

this study, the ivermectin was not given at an earlier stage of the disease.

Ivermectin is beneficial for its antiviral properties and could also be due to its proposed anti-inflammatory role in treating allergic respiratory conditions [12]. In a previous clinical experience, it has suggested the use of ivermectin in two doses, one on the first day and the other on the third day. The dose was 24 mg (4 tablets) of ivermectin for individuals weighing more than 80 kg; and 18 mg (3 tablets) for 60-80 kg body weight [2]. These doses were suggested for asymptomatic family close contact with patients. However, in the present case we used the same dose but for 4 consecutive days as treatment rather than prevention.

Nasal blockage can result from the virus' invasion of the nasal mucosa. Eliminating a stuffy nose is therefore a crucial part of treatment. To treat nasal congestion and promote a simple, easily opened breathing path, acupuncture has been recommended [13]. To lessen the symptoms of such congestion, we utilized an antihistamine decongestant. Moreover, the addition of histamine H₂ receptor antagonist famotidine to the protocol of treatment may reduce and manage inflammatory reactions and increased mucosal secretion of the nose and respiratory passages caused by the virus [14]. Urticaria is a common sequela of COVID-19 infection suggesting the significance of adding antihistamines in patient management.

Ivermectin may be an emergency protection upon exposure or contact with patients, or medication for patients who have become infected in the early stages, even if they have been immunized [4,15,16]. It is therefore, emphasize that for effective use of ivermectin, it should be administered as quickly as possible for confirmed or suspected cases of COVID-19 under medical supervision when indicated.

Conclusion

The anti-parasitic drug ivermectin is suggested to be an effective treatment for COVID-19 especially in the early stages of infection. Future studies, at larger scales, are recommended to confirm the current results.

Declarations

Patient consent

We certify that we have obtained the appropriate patient consent forms. In the form, the patient gave

consent for his clinical information to be reported in the journal with his name and identity hidden.

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Conflicts of interest

There are no conflicts of interest.

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