**EDITORIAL COMMENT - OPEN ACCESS** 





# Appearance of COVID-19 Pandemic in a Rheumatology Clinic in Turkey

Kemal Nas 📵. Gökhan Koz 📵

Coronavirus disease 2019 (COVID-19) is a disease that may cause acute respiratory illnesses in humans with high contagiousness. Having originated in Wuhan city of China in December 2019 and being a member of coronaviridae family, the SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) has been defined as one of the causes of pneumonia (1). According to the data from China, where the disease was first seen, 80% of the people who contract the virus shake it off with minor cold-like symptoms. On the other hand, 20% of the patients require hospitalization, while 5-15% of the patients require intensive care (2). The exact number of patients infected remains unknown; however, the mortality rate is estimated at approximately 1-4% (3). The most common causes of mortality in these patients were found to be interstitial pneumonia and acute respiratory distress syndrome (ARDS) induced by diffuse alveolar damage. A severe form of the disease usually occurs in immunosuppressed patients, as well as elderly patients (>60 years of age) and patients with comorbidities (4, 5).

# **Appearance around the Country**

Measures have been put in place since the first case was officially confirmed in Turkey, and the intensity of the measures has been increased in parallel to the spread of the disease around the world. Acting very rapidly in the face of global developments, the Government of Turkey firstly established the Coronavirus Science Board consisting of highly regarded physicians from the relevant medical specialties on January 10, 2020. This Board has been instrumental in taking measures and decisions around the country. The first measure has been the suspension of the schools and universities two days after the first case was officially confirmed, which has achieved a partial curb on the rapid spread of the disease around the country. Afterwards, a travel restriction has been imposed on cities where the virus is known to be widespread. Meetings and gatherings around the country have been cancelled, and movie theaters, children's playgrounds, recreational areas, restaurants, cafeterias and coastlines have been brought under the coverage of the restrictions. In their earlier meetings, the Science Board has identified the potentially useful drugs that could be employed in the treatment of the disease, and accordingly, potentially useful drugs, medical supplies and protective equipment have been procured in Turkey relatively early. Sakarya ranks the seventh city in Turkey when it comes to the number of cases. A relatively high number of cases in the city is attributable to the presence of a high number of people in the city who have recently been abroad, as well as the geographical closeness of the city to Istanbul, which is a city where the disease is known to be prevalent and many people with a high frequency of business travel live.

As to the additional measures, the public and private sectors have introduced flexible working hours for their employees. The Government has been asking people to adopt the measure of 'voluntary isolation' and stay home unless a matter of urgency occurs. Moreover, people under the age of 20 and above the age of 65, as well as people with asthma, COPD, cardiovascular diseases, chronic renal diseases, hypertension and chronic liver diseases and people on immunosuppressive therapies, have been barred from leaving their houses. All national and international congresses and symposia to be organized in Turkey have been cancelled or postponed. Entry into and exit from 31 cities where the virus is most prevalent has been prohibited and movements into and out of these cities have been made contingent on special permits to be obtained from the respective Governor's Office. On the following days, weekend curfews have begun to be imposed on these 31 cities.

### **Appearance in the Rheumatology Clinic**

A variety of measures have been adopted in our hospital since the first case was confirmed in Turkey on March 11, 2020, including the following: people are allowed entry to the hospital through one single gate reserved for this purpose, and people's temperature is taken at the entry and their histories of a recent international travel or contact with somebody who might have been abroad recently are inquired. All the meetings and specific case

Cite this article as: Nas K, Koz G. Appearance of COVID-19 Pandemic in a Rheumatology Clinic in Turkey. Erciyes Med J 2020; 42(4): 359-61.

Division of Rheumatology and Immonology, Department of Physical Medicine and Rehabilitation, Sakarya University Faculty of Medicine, Sakarya, Turkey

> Submitted 12.05.2020

Accepted 13.05.2020

Available Online Date 15.05.2020

Correspondence

Kemal Nas,
Sakarya University Faculty
of Medicine, Department
of Physical Medicine and
Rehabilitation, Division
of Rheumatology and
Immonology, 54290 Korucuk,
Sakarya, Turkey
Fax: +90 264 275 91 92
e-mail: kemalnas@yahoo.com

©Copyright 2020 by Erciyes University Faculty of Medicine -Available online at www.erciyesmedj.com related consultation sessions have been cancelled in the hospital. The number of health professionals to attend to a patient at once in the form of a bedside visit has been reduced, and the attending health professionals have been adopting the measure of social distancing. Medical students doing their studies in our University have been put on online courses via videoconference system since the suspension of the formal schooling.

Against the potential spread of the disease in our region, several hospitals, including our hospital, have been designated as pandemic hospitals. With increased graveness of the situation, these hospitals have been put to use as pandemic hospitals and all polyclinic and ward-care services other than those for COVID-19 patients, and all the elective surgeries have been halted in these hospitals. Personnel with assignments in COVID-19 wards have received special training on COVID-19 management protocols, both in printed and visual forms, as well as on national referrals between hospitals, isolation plans and use of protective equipment. Moreover, more recent informative videos and texts have been made available from time to time for the personnel to keep their knowledge up to date. So far, neither lack of protective equipment on the side of healthcare personnel nor lack of access to healthcare services on the side of patients has been experienced in our hospital.

In the beginning, we temporarily shut down our rheumatology clinic and attended only to the treatment plans of the rheumatology patients, including those who had gone into remission before the closure of the clinic. However, after a short period of time, we have reopened the clinic to serve, two days a week, new rheumatology patients, as well as urgent rheumatologic cases.

People with rheumatologic diseases are quite inclined to getting an infection due to the condition the disease brings on itself and the immunosuppressive drugs the patients have to take. When they get an infection, these patients end in hospitalization in greater rates than the normal population. It has been shown in previous studies that good disease control is instrumental in reducing infectious disease-related complications (6). During these sessions, patients are provided with extensive explanations on their diseases as well as on how to monitor their joints on their own (including monitoring of night pain, morning stiffness, range of motion, swollen joints and rashes). Overall, patients have shown compliance with the instructions and explanations made in such sessions so far. On the other hand, the Turkish Ministry of Health has made the necessary arrangements for the patients to go directly to the pharmacies to make up their prescriptions without needing to go to the hospital at first to help patients have easy access to their usual medications.

# **Appearance in Patient Treatment**

Previous studies have shown that biological disease-modifying antirheumatic drugs (bDMARD) bring about 1.5–2 times higher risk of infection than conventional synthetic disease-modifying drugs (csDMARD) (7, 8). One may also suggest that patients should continue with their drug therapy as long as possible, especially in the face potentially more significant risks poor disease control brings about (9). It goes without saying that if any signs or symptoms suggestive for infection occur, caused by SARS- CoV-2 or any other infectious etiology, patients should follow their current practice of interrupting immunosuppressive therapy (10). As to the patients who were on corticosteroid therapy, their therapy dose was reduced under  $7.5\,\mathrm{mg/day}$  in a gradual manner, and the therapy was discontinued totally wherever possible. The use of corticosteroids has usually been associated with increased bacterial infections; however, it is also associated with increased viral infections in patients with rheumatoid arthritis (11).

With the spreading of a positive opinion as to the effectiveness of hydroxychloroquine in the treatment of COVID-19, the said drug began to be abused by some people, leading to a difficulty on the part of our patients to have access to the drug for their usual therapy. In light of such developments, the Government of Turkey firstly introduced more stringent conditions for the sales of the drug and then went on prohibiting the sales of the drug in pharmacies as a whole and decided to allow the use of the drug in the treatment of COVID-19 inpatients only. That is why we have since turned to alterative drugs in our patients who were previously on hydroxychloroquine.

The COVID-19 pandemic, which has spread all around the world since December 2019, remains to be a mystery to be solved, and it is still unknown what clinical outcomes this outbreak will bear in the future. In the meanwhile, people, who are a social creature, have been leading an isolated life with limited communication and relations with others around them in an attempt to break the chain of transmission. It is also unknown and curiosity about what social and physiological outcomes this situation with a bear in the future.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – KN, GK; Design – KN, GK; Supervision – KN, GK; Resource – KN, GK; Literature Search – KN, GK; Writing – KN, GK; Critical Reviews – KN, GK.

Conflict of Interest: The authors have no conflict of interest to declare.

**Financial Disclosure:** The authors declared that this study has received no financial support.

# **REFERENCES**

- Özdemir Ö. Coronavirus Disease 2019 (COVID-19): Diagnosis and Management. Erciyes Med J 2020; 42(3): 242–7. [CrossRef]
- Pan F, Ye T, Sun P, Gui S, Liang B, Li L, et al. Time Course of Lung Changes On Chest CT During Recovery From 2019 Novel Coronavirus (COVID-19) Pneumonia. Radiology. February 13, 2020:200370. doi: 10.1148/radiol.2020200370. [Ahead of Print] [CrossRef]
- Lipsitch M, Swerdlow DL, Finelli L. Defining the Epidemiology of Covid-19 - Studies Needed. N Engl J Med 2020; 382(13): 1194–6.
- Wang D, Hu B, Hu C, Zhu F, Liu X, Zhang J, et al. Clinical Characteristics of 138 Hospitalized Patients With 2019 Novel Coronavirus-Infected Pneumonia in Wuhan, China. JAMA 2020; 323(11): 1061–9.
- Baddal B. Importation and Transmission Routes of COVID-19 into Northern Cyprus: Considerations and Challenges. Erciyes Med J 2020; 42(3): 333-5. [CrossRef]
- Accortt NA, Lesperance T, Liu M, Rebello S, Trivedi M, Li Y, et al. Impact of sustained remission on the risk of serious infection in patients with rheumatoid arthritis. Arthritis Care Res (Hoboken) 2018; 70(5): 679–84. [CrossRef]
- Listing J, Gerhold K, Zink A. The risk of infections associated with rheumatoid arthritis, with its comorbidity and treatment. Rheumatology (Oxford) 2013; 52(1): 53–61. [CrossRef]

- 8. Tudesq JJ, Cartron G, Rivière S, Morquin D, Iordache L, Mahr A, et al. Clinical and microbiological characteristics of the infections in patients treated with rituximab for autoimmune and/or malignant hematological disorders. Autoimmun Rev 2018; 17(2): 115–24. [CrossRef]
- 9. Edwards CJ, Galeazzi M, Bellinvia S, Ringer A, Dimitroulas T, Kitas G. Can we wean patients with inflammatory arthritis from biological therapies?. Autoimmun Rev 2019; 18(12): 102399. [CrossRef]
- 10. Coletto LA, Favalli EG, Caporali R. Psoriasis and psoriatic arthritis: How to manage immunosuppressants in COVID-19days. Dermatol Ther. 2020 Apr 14:e13415. doi: 10.1111/dth.13415. [Epub ahead of print] [CrossRef]
- Favalli EG, Ingegnoli F, De Lucia O, Cincinelli G, Cimaz R, Caporali R. COVID-19 infection and rheumatoid arthritis: Faraway, so close!. Autoimmun Rev 2020; 19(5): 102523. [CrossRef]