What about rheumatic diseases and COVID-19?

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To the editors

Based on the WHO situation report of 26 January 2020, coronavirus disease 2019 (COVID-19) has been confirmed in nearly 99 million patients in more than 200 countries and there have been 2 million related deaths around the world [1]. For comparison, in Algeria, there have been 106 097 cases and 2871 related deaths [2].

The large majority of patients presented with fever, fatigue and dry cough; the higher case fatality rate has mainly been noted in older patients with co-morbidities (e.g. diabetes, hypertension, cancer, and cardiovascular and chronic respiratory diseases) [3]. An individual with sudden onset ageusia or anosmia without the presence of other cause is also identified as a potential case of COVID-19 [1].

So far, it would appear that none of the deaths have been directly associated with rheumatic diseases. Approximately 10% of the Algerian population (more than 4.2 million inhabitants) have at least one autoimmune disease, and 7% of the population (more than 3 million people) have autoimmune rheumatic diseases [4]. Patients with rheumatic disease are known to have an increased risk of infection, generally attributed to the overall degradation of the immune system [5].

Since the beginning of the epidemic, chloroquine and hydroxychloroquine were the best-known drugs used, and showed powerful in vitro antiviral effects in a coronavirus test by increasing endosomal pH, which is necessary for virus–cell fusion, in addition to interfering with glycosylation of cellular receptors [6]. It is also known to have an immune-modulating action. Studies have continued to multiply, some have shown very interesting results, and others have claimed that it is ineffective and dangerous [7]. It remains the protocol used in Algeria [8].

There is currently no compelling and irrevocable substantiation that patients with rheumatic diseases are more at risk with regards other co-morbidities [9].

Further detailed investigations should be carried out to best characterize COVID-19. However, the experience and knowledge gained from dealing with other existing infectious diseases and the results of therapies used on patients with rheumatological disease suggest that there is an increased probability for this community to acquire severe acute respiratory syndrome coronavirus 2 [10].

Currently, WHO provides the same guidance as at the beginning of the pandemic. They advise the general population to take the same preventive measures as against influenza and related infectious diseases. These recommendations can be summed up as: frequent hand washing; social distancing (approximately 2 m between individuals); wearing a mask; avoiding touching the face; and sneezing or coughing into the elbow. If there is onset of fatigue, significant fever and a cough then it is also important to be examined by a doctor.

The situation we are experiencing can be described as unique and unexpected; this pandemic highlights the weaknesses of medical systems around the world and the knowledge gaps which face us on a daily basis. More than ever we need massive collaboration from all medical branches (including rheumatology). Indeed, the rheumatologist as one of the front line workers should always consider other options whenever a patient comes with common rheumatic manifestations to try to limit possible transmission of the virus.

Authors’ contributions

HAA conceived, drafted, revised and approved the manuscript; IB drafted, revised and approved the manuscript.

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Conflicts of interest

The authors declare that there are no conflicts of interest.

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