



Rheumatology Care in the Face of COVID-19

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Key Summary Points

As the COVID-19 pandemic has taken hold in Italy and other countries, a major challenge for rheumatologists is the management of patients with rheumatological diseases in the context of the higher risk of infection.

Measures to reduce healthcare encounters and potential exposure to COVID-19 and guidance for patients with ongoing disease-modifying anti-rheumatic drugs (DMARDs) and biological treatment have to be implemented with careful stratification of the risk in each patient.

Implementation of instruments to monitor patient's health and telemedicine will be opportunities in this context.

Currently, the entire world is dealing with an emergency due to the new COroNaVirus Disease 2019 (COVID-19). On 11 March 2020, the

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World Health Organization (WHO) defined the infection as a pandemic. As of 6 May 2020, there were > 3,700,000 cases, 212 countries and territories involved and > 250,000 deaths, which have strongly impacted the health systems [1, 2]. Social behaviour modification measures and lockdowns of entire territories were deemed necessary to limit the spread of the infection. In this context, the pandemic is changing the management of many chronic diseases, including inflammatory rheumatic diseases, leading the rheumatology community to face important challenges, mainly in those countries with a high number of cases, such as Italy. At present, it is still difficult to identify all emerging major issues coming from this outbreak. In this commentary, we are trying to list some of them and to propose potential solutions.

First, a major challenge for rheumatologists will be the management of patients with a higher risk of infection. In fact, as the COVID-19 pandemic took hold in Italy and other countries, clinicians were urgently contacted by rheumatic patients understandably fearful about their health status. One of the most common questions from patients was whether they should stop taking their medications, in particular biologicals and other conventional or targeted disease-modifying anti-rheumatic drugs, because of a potential increase of risk of infection. In the future, rheumatologists will

have to pay attention to potential risks and benefits of cytokine inhibition when prescribing drugs [3], carefully stratifying the risk in each patient, even with a potential vaccination. Furthermore, a shortage of some drugs for patients with rheumatic diseases occurred in Italy at the beginning of the outbreak. In particular, hydroxychloroquine (HCQ) and tocilizumab were less available for those patients because of their use in patients with COVID-19. In fact, mainly for HCQ, patients reported difficulties with the supply of this drug. If mass prophylaxis is adopted worldwide, this will raise the question of whether there will be enough HCQ for rheumatic patients [4].

Besides the problem of drug availability, another important aspect for the rheumatologist is the clinical management. Patients with rheumatic diseases have been recommended to follow the general public health measures outlined by the WHO and regional health systems. Recently, the American College of Rheumatology proposed guidance for patients and physicians; measures for potential exposure to COVID-19, reduced frequency of laboratory monitoring, optimal use of telehealth, increasing intervals between intravenous medications, and guidance for patients with ongoing treatment (with and without exposure to COVID-19) were proposed [5].

Dealing with more specific issues involving patient management, the reduction of all clinical activities in almost all hospitals and outpatient clinics could be a disadvantage for both patients and physicians in following routine care. This is a logistical aspect that needs to be addressed and, for some health systems, is becoming an important one. Furthermore, as a consequence of the reduction of space and time dedicated to rheumatic patients in the clinics, it could be even more difficult to perform physical examinations in patients with inflammatory arthritis, such as the joint count. The evaluation of skin involvement in patients with psoriatic arthritis (PsA) will be another issue to consider.

Moreover, a treat-to-target approach (T2T) with tight control has been recommended for different rheumatic diseases, including rheumatoid arthritis, PsA, and axial spondyloarthritis, to achieve low disease activity and/

or remission [6]. However, with the reduction of up to 50% of clinical activities, the possibility to carry out a T2T strategy will be difficult. Consequently, disease flares and a loss of these achievable targets may occur. This could lead to a reduction in the adherence to and compliance with treatment, which could worsen outcomes. Finally, in the past years a striking collaboration between physicians of different medical branches has been proposed to set up shared outpatient clinics for the management of patients, such as combined clinics for patients with PsA aiming to improve the management. We believe that this type of approach could be difficult in light of a re-organization of health resources because of the COVID-19 outbreak in some settings.

The possible solution for some of these clinical and management aspects will be handled by telemedicine (TM). This will be a potential opportunity for patients with rheumatic diseases. In fact, due to social distancing and reduced mobility, the implementation of TM will be useful to monitor patient's health. TM has potential to help patients get the supportive care they need while minimizing their exposure to infection risk factors [7]. Although the use of TM has increased over the last years, rates of TM adoption are still low. A recent survey demonstrated that patients are willing to use TM, but barriers still exist. For example, patients may be unaware of TM as an option and do not know how to access it. To promote the use of TM in the era of COVID-19, various online resources have been developed from regulatory agencies and professional societies [7]. In addition, as an implementation of TM, some interesting virtual examinations of patients have been proposed in other settings [8]. Therefore, a systematic virtual examination can help physicians to manage common musculoskeletal symptoms by using apps or other digital devices.

In Italy, although all 20 regions implemented national TM guidelines in 2018, many Italian hospitals and outpatient clinics lack the necessary hardware and technical resources [9].

In conclusion, in the face of COVID-19 rheumatology care should evolve in different ways. New clinical and therapeutic approaches, following social distancing measures, and

management of patients with new instruments such as TM should be implemented. Furthermore, to avoid the high risk of being unable to give access to new patients and compromising prevention, diagnosis, and treatment, new care models are necessary.

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