Experience of telemedicine use in a big cohort of patients with rheumatoid arthritis during COVID-19 pandemic

We have read with interest the work of Bozzalla-Cassione *et al*[1] published recently in your journal regarding the implementation of a telemedicine programme for patients with lupus in northern Italy. It is logical to suppose that the risk of patients with rheumatic diseases of having a more severe clinical course if they become infected with the COVID-19 infection is very high; however, although some of the reports show that there seems to be a low incidence of COVID-19 infection in patients with rheumatic disease, collaborative work with large cohorts is needed, which could show us the real incidence of COVID-19 infection in these patients and what happens with the establishment of telemedicine programmes.[2–6]

We show an experience in a specialised centre in Bogota, Colombia; currently, we have a cohort of 5597 patients with rheumatoid arthritis (RA) in exclusively ambulatory care. On 12 March 2020, in Colombia, the health emergency by COVID-19 was established and a week later the Ministry of Health ordered the outpatient care procedure for the population in isolation. From that moment on, our institution, carrying out the proper logistical and legal processes, proceeded to convert its ambulatory care services into care through telemedicine.

By telecounselling, patients were offered consultation by telemedicine due to the high epidemiological risk of COVID-19; the patient gave informed consent to accept it or otherwise to request a face-to-face consultation despite the epidemiological risk warning; a third option was that the patient did not accept telemedicine or face-to-face consultation for personal reasons.

Here, we report the outcomes since 21 March–16 May (8 weeks later). For rheumatology care, the doctor must request informed consent for the consultation; then a standardised protocol was applied both for RA and also for suspected symptoms of COVID-19; as a measure of disease activity Patient Activity Score (PAS) was applied, and Health Assessment Questionnaire (HAQ) was also evaluated. When during the consultation the doctor finds that there is potentially high activity of the disease, a face-to-face consultation was ordered. In case of need, patients are sent to telemedicine consultation with the physiatrist or psychologist. For face-to-face consultation, standardised clinimetry instruments are used.

Until May the 16 (8 weeks later), 3503 patients have been followed up; 3228 (92%) have been seen by telemedicine and 275 (8%) by conventional face-to-face consultation; of these patients, 55 (20%) men and 220 (80%) women attended the face-to-face consultation; of patients attended by telemedicine, 567 (17.5%) were men and 2661 (82.5%) were women. Regarding COVID-19 infection, in 3 of the 275 patients who attended an in-person consultation, COVID-19 infection was suspected due to respiratory symptoms, but was finally ruled out. None of the patients seen so far by telemedicine had suspected COVID-19 by clinic or had contact with COVID-19 confirmed patients.

At first glance, these results seem surprising; there are zero incidences of COVID-19 infection in this large cohort of patients with RA, which we believe is due to the sanitary measures imposed by the country and to the adequate and standardised use of telemedicine. At first sight, we found that almost 75% of patients are well controlled regarding disease activity; however, the centre has started a mixed methodology study that includes a cohort study and a qualitative study to evaluate, whether telemedicine is effective in controlling disease activity of RA, such as the usual outpatient consultation. In this regard, there are some publications, but in the conditions of a pandemic like the present one, we do not have the evidence; on the other hand, it is necessary to evaluate the real incidence of COVID-19 infection in this group of patients and its clinical course.

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Patient and public involvement Patients and public were not involved in this first phase of the study; in future, at the end of the observational study, we will involve the patient expectations, believes and experiences in the in-person consultation, telemedicine models in addition to the experiences of the healthcare workers seeing those patients through the qualitative analysis of the study.

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REFERENCES

1 Bozzalla Cassione E, Zanframundo G, Biglia A, *et al*. COVID-19 infection in a northern-Italian cohort of systemic lupus erythematosus assessed by telemedicine. *Ann Rheum Dis* 2020;79:1382–3.
2 Favalli EG, Ingegnoli F, Cimaz R, *et al*. What is the true incidence of COVID-19 in patients with rheumatic diseases? *Ann Rheum Dis* 2021;80:e18.
3 Monti S, Balduzzi S, Delvino P, *et al*. Clinical course of COVID-19 in a series of patients with chronic arthritis treated with immunosuppressive targeted therapies. *Ann Rheum Dis* 2020;79:667–8.
4 Zhang Y, Wang J, Zhao L, *et al*. Online management of rheumatoid arthritis during COVID-19 pandemic. *Ann Rheum Dis* 2021;80:e4.
5 Figueroa-Parra G, Aguirre-Garcia GM, Gamboa-Alonso CM, *et al*. Are my patients with rheumatic diseases at higher risk of COVID-19? *Ann Rheum Dis* 2020;79:839–40.
6 Monti S, Montecucco C. Prevalence of COVID-19 among patients with rheumatic diseases: the need to await results from large collaborative studies. *Ann Rheum Dis* 2021;80:e15.