

## Telerheumatology in COVID-19 era: a study from a psoriatic arthritis cohort

We read with interest the article by Gupta *et al*<sup>1</sup> who reported the management of treatments for rheumatic diseases during COVID-19 pandemic among practitioners in India. In this study, the authors showed that about half of the physicians would reduce the use of biological disease-modifying antirheumatic drugs (bDMARDs) or defer specific drugs such as rituximab.<sup>1</sup> Choices were apparently made considering possible relationships between drug mechanism of action and effect on the viral infection.<sup>1</sup>

During COVID-19 pandemic, telemedicine is emerging as a possible tool for reducing the risk of contagion and viral spread,<sup>2-4</sup> and a useful strategy for the management of chronic diseases.<sup>5,6</sup>

As of 29 April 2020, the outbreak of COVID-19 generated 201 505 confirmed cases in Italy, with 2405 confirmed cases in Naples Metropolitan area.

The objective of our study was to evaluate telemedicine when offered as part of routine care for the follow-up of patients with psoriatic arthritis (PsA), during the COVID-19 pandemic, for reducing risk of contagion and the number of face-to-face visits.

From 9 March 2020, our face-to-face outpatient clinic, devoted to management of patients with PsA under subcutaneous bDMARDs and targeted synthetic DMARDs (bDMARDs and tsDMARDs), was converted to a telerheumatology model over 7 weeks.

Every patient with an existing appointment was called by phone and was asked the consent to perform a live interactive telemedicine visit.

Established patients who were unable or unwilling to perform a video visit were offered the option of a telephone visit.

All the patients accepted of interacting with physicians by live interactive video or telephone visits. These were also supported using secure data transmission of laboratory test and instrumental reports, and email consultations. Patients were also invited to upload high-resolution photographs of suspected active articular and cutaneous manifestations.

In case of severe symptoms and signs, as evaluated via telemedicine, we provided to perform an in-person visit within the same day or the following day.

Within 7 weeks, we completed 105 telerheumatology visits for 105 patients with PsA (51 male and 54 female; mean age: 52.3 years), under bDMARDs (91 cases) or tsDMARDs (14 cases).

In 94 patients, therapy with bDMARDs or tsDMARDs was continued due to effectiveness and safety. In 10 of them, a therapy with non-steroidal anti-inflammatory drugs (NSAIDs) was added, due to monoarticular or enthesal pain in the absence of local swelling and redness, as evaluated by anamnesis and photographs; particularly, in 7 cases, NSAIDs were added to bDMARDs therapy and, in 3 cases to phosphodiesterase 4 inhibitor (PDE4i) therapy. In one patient on methotrexate and anti-tumour necrosis factor- $\alpha$  therapy, methotrexate was withdrawn due to an increase of transaminases. In this case, a strict laboratory evaluation and liver ultrasound were required.

Signs of active arthritis and/or enthesitis were clearly referred by 10 patients and visualised by photographs. These were also associated with increased pain on Visual Analogue Scale (mean: 7.6). Among them, in three cases, a psoriasis worsening was also seen. For all these 10 cases, we decided to perform an in-person visit within the same day or the following day.

In our experience, telemedicine has represented a valuable instrument for PsA care in COVID-19 era. Telemedicine could have a key role for the management of patients with rheumatic disease, in particular for those with comorbidities, because of a higher severity rate in the case of COVID-19.<sup>5,6</sup>

Telemedicine could also represent a valid support to maintain social distance and to help 'flatten the pandemic curve'. However, further studies are need for evaluating this approach.

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