



COVID-19 in Italian Sjögren's syndrome patients: a monocentric study

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The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic is a challenge for global health. To prevent further spreading of the infection a national lockdown has been adopted in Italy from March 9th to May 3rd, 2020. The following day, the Italian National Institute of Health (INIH) reported 209,254 cases in our country, 3.2% (6839 cases) in the Lazio region, with an incidence of 123.8 cases per 100,000 inhabitants and 39 nasopharyngeal swabs (NPS) per 10,000 inhabitants being performed [1]. Concern arises about the risk of infection in patients with autoimmune rheumatic diseases [2], also frequently burdened by those comorbidities, such as diabetes, hypertension or lung disease, currently considered as the main determinants of severity of the coronavirus disease 2019 (COVID-19) [3]. To date, no information is available regarding the incidence of COVID-19 among patients with Sjögren's syndrome (SS). Between the 10th of May and the 10th of June, a telephone questionnaire was proposed to a sample of patients with primary SS (2002 American-European Consensus Group criteria) [4] attending our "Sjögren's clinic" at the hospital Policlinico Umberto I in Rome (Italy). Data about contacts with subjects with COVID-19, COVID-19 incidence and related

symptoms, current therapy, comorbidities, other health problems and lockdown related impact on daily life were collected. Patients were also asked about their adherence to the COVID-19 prevention measures proposed by the INIH and by the Italian Ministry of Health including frequent hands washing, social distancing and the use of protective masks. We collected data from 150 patients, mostly resident in the Lazio region (130/150, 86.6%), 145 females and 5 males, with a mean age of 62 years and a mean disease duration of 9 years. 105 patients out of 150 (70%) reported comorbidities such as hypertension, dyslipidemia, diabetes mellitus, lung and cardiovascular diseases. None had a confirmed diagnosis of COVID-19. Six patients (4%) reported contact with established cases of COVID-19 but none of them developed symptoms, while other six (4%) reported suspected symptoms for COVID-19 such as fever, cough and gastrointestinal complaints. In all cases symptoms were mild and self-limiting; only one patient was swabbed with a negative result. In total, NPS were performed in eight patients (5.3%) with no evidence of infection. 27 patients (18%) were on hydroxychloroquine (HCQ), 13 (8.6%) on glucocorticoids, and 13 (8.6%) on other immunosuppressants. No patient discontinued therapy. Twenty-one patients (14%) reported a worsening in their general health with exacerbation of musculoskeletal pain (6/150, 4%) and appearance of herpes zoster (5/150, 3.3%) being the most common complaints. During the lockdown period 49 patients (32.6%) never left home, 98 (65.3%) went out for basic necessities, 25 (16.6%) to have blood tests, 22 (14.6%) to perform medical visits and 19 (12.6%) for work obligations, 3 patients (3%) used public transports. All patients reported full adherence to the above mentioned COVID-19 prevention measures. A major drawback of this study is the very low number of NPS performed linked to the limited possibility to perform such tests at the time of the study. However, the percentage of NPS performed in this cohort was even higher than in the general population during the same period in the Lazio region. The high adherence to the prevention measures in this cohort of SS patients, as in other patients with inflammatory rheumatic diseases [5–7], may have favored the low

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incidence of COVID-19 detected. Moreover, none of them was treated with more than 10 mg/day glucocorticoids, which is known to be associated with a higher odds of hospitalization for COVID-19 [8]. On the other hands, other studies do not seem to suggest an increased risk of SARS-CoV-2 infection for patients with inflammatory rheumatic disease nor a worse outcome of the associated disease [5, 9, 10]. In conclusion, it is likely that the awareness of having a chronic disease and the compliance with prevention rules, have played a role in limiting the incidence of SARS-CoV-2 infection in this cohort of Italian patients with primary SS who have maintained an acceptable state of health during the lockdown period.

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Compliance with ethical standards

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