Editorial

The COVID-19 pandemic highlights the need for a psychological support in systemic sclerosis patients

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Systemic sclerosis (SSc) in a chronic autoimmune disease characterised by internal organs damage and skin fibrosis potentially leading to disability and reducing quality of life (QoL). In SSc, patients must face the fear and uncertainty induced by the disease chronic progression and the changes of the physical appearance leading to body image distress (1).

The diminished life expectancy, the body pain, the gastrointestinal involvement and the reduced health-related QoL explains the higher risk of depression observed in SSc patients (2-4). Depression is reported to be more frequent in women than in men, and is mainly due to decreased QoL, fatigue and reduced physical activity. However it does not impact patients survival (5, 6). Older age, diffuse cutaneous subset (dcSSc) and pulmonary arterial hypertension (PAH) are the major determinants of a lower health-related QoL when measured by the Short Form 36 (SF-36). Moreover, a strong association between disability and depressive symptoms is often reported (7-9).

Illness-related uncertainty is one of the main stressors, influencing the behaviour and disease perception, thus leading to an excessive self-examination, ultimately increasing anxiety symptoms (2). Also anxiety is more frequent in SSc female than in male and unrelated to disease severity (10, 11).

In the last years, numerous studies reported an impaired health-related QoL and an increased prevalence of psychiatric symptoms among SSc patients (5, 12, 13). In addition, data on psychosocial aspects as body image distress, sexual function and disability are increased (14), reinforcing the need to pay more attention to psychological aspects in SSc patients in routine clinical practice.

In the last three years, the attention to patients mental health has globally grown and COVID-19 pandemic has increased the need for the evaluation of psychological symptoms, forcing clinicians to address the problem in every day practice, dealing therefore with an increasing number of patients characterised by psychiatric symptoms (15).

Pre-existing medical conditions exposed patients with chronic diseases at major risk of COVID-19 infection and complications. For this reason, SSc patients are at greater risk for COVID-19-related stress, boredom, grief, fear, depression and anxiety from the earliest phase of the pandemic (15, 16). In the management of patients with chronic diseases as SSc, the COVID-19 has quickly prompted the attention on psychological aspects, making the clinician aware that a new vision and care of SSc patients was mandatory.

Recently, Henry *et al*. (17) evaluated anxiety and depression in SSc patients in the pre-COVID-19 and during the COVID-19 through March 2021 and assessed the trend of anxiety, depression, fear and loneliness across the pandemic era through March 2022 in patients enrolled in the Scleroderma Patient-centred Intervention Network (SPIN). A previous study focussed the attention on mental health of SSc patients in the early phase of pandemic and on its comparison with pre-COVID-19 status. The analysis of SSc patients from the SPIN Cohort evaluated anxiety and depression symptoms before and after the pandemic reporting an increase in anxiety but not in depression during the COVID-19 (18). Also other data from previous studies confirmed the attention on SSc patients mental health in the first phases of pandemic and on the different support

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programmes conducted to aid patients with chronic disease in such a stressful era (18-21).

The study by Henry *et al*. also assessed the trend of psychological symptoms when patients faced new challenges (17). In fact, at the beginning of pandemic fear and uncertainty of COVID infection were common feelings in patients with chronic diseases (treated with immunosuppressant) and in patients with SSc complications as interstitial lung disease. Afterwards, the attention was focused on other concerns, as vaccines safety, their efficacy, the presence of new variants of virus, the progressive less use of preventive restrictions as masks and social distancing and consequently the recovery of social relations. Therefore, the analysis of Henry *et al*. reflects not only the fear of the pandemic but also the feelings of patients in managing the everyday living with the virus and in the progressive recovery of social relationships after the pandemic era. The study showed that anxiety increased in April 2020, returned to pre-COVID-19 levels by mid-2020 and remained stable from this period until March 2022. In SSc patients, depression symptoms were stable in the first months of 2020 and then slightly decreased. Loneliness was stable during the study period and COVID-19 fear was high in the early phase and quickly decreased. The trend of psychological symptoms (depression, anxiety, fear and loneliness) was similar across time by subpopulations defined by age, sex, country and disease cutaneous subset and these results were in line with previous data (17, 20).

More attention in detecting the differences of psychological symptoms trend in the different SSc sub-populations may be of paramount importance to identify patients at major risk to increase impaired mental health symptoms during stressful events. Some previous data suggested an association between increased fear and reported interference of breathing problems in daily activities, lower economic availability and greater pre-pandemic anxiety levels (22). The possibility to define determinants of mental health worsening in SSc may help to stratify patients, thus applying specific support and preventive programmes on different disease subsets.

In the study by Henry *et al*. depression and anxiety trajectories were not influenced by age or disease subsets: this is not in agreement with previous data regarding mental health symptoms in SSc and disease features in the pre-pandemic era correlating depression to gender, older age, dcSSc and cardiac involvement (PAH), pain or gastrointestinal symptoms (3-5, 7-9). The relationship between anxiety symptoms and disease characteristics were not significant.

Moreover, the trend of mental symptoms from pre-COVID-19 to pandemic era could be traced, comparing patients with to those without cardio-pulmonary involvement, knowing the high risk of COVID-19-related complications in patients with pre-existing lung disease. This analysis has not been performed by Henry *et al*. as well as by other authors, and the trend of psychological symptoms in patients with different organ involvement is still unknown.

Another point to consider is the fact that the authors investigated psychological aspects of SSc patients until March 2022 when vaccines were widely available for frail patients with chronic diseases. For this reason, the interest could be focused on fear, on loneliness, on immunosuppressed patients as well as on uncertainty and anxiety to investigate if there may be any correlation to the ongoing therapy. In fact, this specific datum might clarify the therapeutic impact during a stressful period. It is well known that immunosuppressant drugs expose patients to a greater infectious risk, contributing to increase anxiety and/or fear levels, also affecting vaccine efficacy.

For this reason, now other retrospective studies are warranted to identify determinants of psychological and psychiatric symptoms identifying the progression of the deterioration from the pre-COVID to the pandemic. This may help to understand what are the patient categories at greatest risk. Unfortunately, the COVID-19 is an extremely stressful model for some subjects including patients with chronic diseases. Therefore, the identification of a subpopulation which is more sensitive and is burdened by a major risk to develop or worsen either depression and anxiety or other metal symptoms, might help the clinician to identify in practice the frailest patients who need early a psychological support to prevent the onset of psychiatric symptoms.

The identification of patients at major risk for psychological support suggests a multidisciplinary collaboration (psychologists and psychiatrists) to decide the best support programmes according to patients individual needs.

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