

**CORRESPONDENCE****Hidradenitis suppurativa and adalimumab in the COVID-19 era**

A general concern about a potentially higher risk of COVID-19 among patients with inflammatory skin diseases, such as hidradenitis suppurativa, under treatment with biologics has promoted a number of reports in the scientific literature [1]. Recently, Blaszcak [2] found only a modestly increased risk of infections in HS patients treated with adalimumab versus those under placebo based on a review of the data published for PIONEER I and II trials [3]. Real-life data on COVID-19 risk in HS patients treated with adalimumab may be inferred only from a single-center study in which 75 HS patients under adalimumab treatment were analysed, none of whom developed COVID-19 [4]. Twenty Italian tertiary referral centers previously involved in a study on adalimumab treatment for HS [5] were asked to participate in a telephone-based survey, which was conducted between March 30<sup>th</sup> and April 30<sup>th</sup>, 2020. Patients with HS under adalimumab were asked about possible diagnosis of severe acute respiratory coronavirus disease 2 (SARSCoV-2) infection. The International HS Severity Score System (IHS4) [6] was used at the last visit and the duration of adalimumab treatment in weeks was recorded. In total, 316 patients were included in the study, 311 of whom were under adalimumab at the time of the survey and five had temporarily discontinued adalimumab due to safety concerns related to COVID-19 on the advice of their general practitioner. There were 201 male patients (64.6%) and median age was 55.1 (range: 19-70). The median duration of adalimumab treatment was 100 (IQR: 70-132) weeks. The last median IHS4 score before the telephonic survey was 7 (IQR: 4-14). Three patients (1%) received a diagnosis of COVID-19, confirmed by nasopharyngeal swab. Using Fisher's exact test, no statistically significant differences in

COVID-19 occurrence were found between patients under active treatment and patients who stopped treatment for precautionary reasons ( $p=1$ ).

Patient 1 was a 65-year-old housewife without comorbidities except for moderate obesity. Her symptoms, including fever, cough, myalgia, hypogeausia and hyposmia, dated back to February 15<sup>th</sup>. Patient 2 was a 28-year-old pregnant woman with Crohn's disease diagnosed with COVID-19 on March 10<sup>th</sup>. Her symptoms included fever, cough, coryza and pharyngodynia, hypogeausia, hyposmia and gastrointestinal symptoms. Patient 3 was a 25-year-old man who was asymptomatic and underwent a COVID-19 swab in accordance with a testing policy at work. No patients were hospitalized and all of them fully recovered; only Patient 2 temporarily discontinued adalimumab. The full protocol was approved by the Institutional Review Board of the Ethical Committee of the principal investigator's centre (Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Milan, Italy) with the protocol number: 464\_2020. All the subjects enrolled in the study gave their informed consent.

A limitation of our study is the unavailability of data on SARS-CoV-2 infection of those in close contact with our patients.

According to the last median IHS4 score before the telephonic survey, our cohort was mainly represented by patients with moderate HS, with a median adalimumab treatment duration of a little over two years. Based on the low prevalence of COVID-19 (1%) in our cohort, as well as other relevant studies [2, 3], we hypothesize that both the disease and its therapy with adalimumab do not represent a risk factor for COVID-19. Therefore, adalimumab should not be suspended by HS patients themselves due to COVID-19-related reasons.

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