No Systemic Lupus Erythematosus with COVID-19 in Hong Kong: The Effect of Masking?

To the Editor:

We read with interest the report by Favalli, *et al* on the incidence of the coronavirus disease 2019 (COVID-19) in Italian patients with connective tissue diseases[1]. None of the 61 patients with systemic lupus erythematosus (SLE) surveyed was confirmed to have COVID-19. This is in contrast to the initial analysis of the COVID-19 Global Rheumatology Alliance registry, which shows an overrepresentation of SLE in patients with rheumatic diseases who have been diagnosed with COVID-19[2]. While we do believe that patients with SLE might be more susceptible to COVID-19 because of the underlying disease, comorbidities, and the use of immunosuppressive drugs, they might be unexpectedly protected by virtue of the immune-modulators that are used to control their disease. The jury is still out owing to the paucity of data to date. We report here on the situation in Hong Kong.

As of April 15, 2020, there were 1016 confirmed COVID-19 cases in Hong Kong, which has a population of 7.5 million[3]. There were only a handful of suspected or confirmed local cases subsequently, up to the time of writing on May 6, 2020. All confirmed cases were hospitalized and managed by the Hospital Authority, the public healthcare provider of Hong Kong. A territory-wide search in the electronic data management system, Clinical Data Analysis and Reporting System, of the Hospital Authority revealed 5 cases of inflammatory arthropathies up to April 15. There was no patient with SLE diagnosed to have COVID-19 in Hong Kong. The local prevalence of SLE was reported to be 0.1%[4].

While there is a possibility of underdiagnosis or underreporting of COVID-19 and SLE, the chance is low because of the intense surveillance for case detection and the much-heightened public health concerns in Hong Kong[5]. On the other hand, community-wide mask wearing was practiced by the general population at an early stage of the outbreak, which was believed to be one of the reasons for the relative low overall incidence of COVID-19 in Hong Kong[6]. To answer the question of whether our blessing of no SLE with COVID-19 in Hong Kong is due to cases masked or to protective masks, we need more time and further studies.

HO SO, MBBS, FHKAM, FHKCP; JOYCE WING YAN MAK, MBBS, FHKAM, FHKCP; LAI-SHAN TAM, MBChB, FHKAM, MD, FRCP, Department of Medicine and Therapeutics, The Chinese University of Hong Kong, Hong Kong. Ethical approval from the Joint CUHK-NTEC Clinical Research Ethics Committee (reference number: 2020.069). Address correspondence to Dr. H. So, Department of Medicine and Therapeutics, The Chinese University of Hong Kong, Room 114042, 9/F, Lui Che Woo Clinical Sciences Building, Prince of Wales Hospital, Hong Kong. E-mail: hoso@cuhk.edu.hk

REFERENCES

1. Favalli EG, Agape E, Caporali R. Incidence and clinical course of COVID-19 in patients with connective tissue diseases: a descriptive observational analysis. J Rheumatol 2020 May 15 (E-pub ahead of print).
2. Gianfrancesco MA, Hyrich KL, Gossec L, Strangfeld A, Carmona L, Mateus EF, et al. Rheumatic disease and COVID-19: initial data from the COVID-19 Global Rheumatology Alliance provider registries. Lancet Rheumatol 2020 Apr 16 (E-pub ahead of print).
3. Hong Kong government press release. CHP investigates four additional cases of COVID-19. [Internet. Accessed May 26, 2020.] Available from: www.info.gov.hk/gia/general/202004/15/P2020041500561.htm
4. Mok CC. Epidemiology and survival of systemic lupus erythematosus in Hong Kong Chinese. Lupus 2010;20:767-71.
5. Cowling BJ, Ali ST, Ng TWY, Tsang TK, Li JCM, Fong MW, et al. Impact assessment of non-pharmaceutical interventions against coronavirus disease 2019 and influenza in Hong Kong: an observational study. Lancet Public Health 2020 Apr 17 (E-pub ahead of print).
6. Cheng VC, Wong SC, Chuang VW, So SY, Chen JH, Sridhar S, et al. The role of community-wide wearing of face mask for control of coronavirus disease 2019 (COVID-19) epidemic due to SARS-CoV-2. J Infect 2020 Apr 23 (E-pub ahead of print).

First Release June 15 2020; J Rheumatol 2020;47:xxxxx; doi:10.3899/jrheum.200605