

## Obesity, the Cinderella of Clinical Medicine

### To the Editor:

The conclusions of Lemyze et al (1) in their recent article published in *Critical Care Medicine*, herein literally quoted, were: "In its most severe form, coronavirus disease pneumonia strike preferentially the vulnerable obese population, evolved toward a multiple organ failure, required prolonged mechanical ventilatory support, and resulted in a high workload for the caregivers." This statement unequivocally reflects reality and illustrates the deep link existing between obesity, a long-standing disease, and the worst outcome of the pandemic: The death of human beings.

Obesity is usually estimated by measuring the body mass index (BMI) of an individual. BMI is a transversal determination which does not properly consider that the metabolic calamity is a continuous process that has been affecting cells, tissues, systems, and organs for many years. It is because of these attributes that obesity still is the largest health issue today and the most devastating and lethal pandemics in the history of mankind (2).

The connotations of the mechanisms behind obesity and associated insulin resistance are frequently taken lightly, and even the most prominent health agency in the world recently resolved in global policy disregarding the depth of the underlying metabolic derangement. Indeed, the World Health Organization (WHO) decision of suspending the research of certain medications aimed to deal with the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemics (3), was based upon a publication in which the drug-associated mortality was determined by comparing survivors, who were nonobese (BMI = 27) to nonsurvivors who were obese (BMI = 31.8) (4). These authors did include the effects of the BMI as an independent influence on the outcome; however, obesity was considered as just another discrete risk factor, and the ubiquitous, chronic nature of the metabolic derangement were de facto omitted. While the publication was later retracted (5) and the decision of the WHO modified, both events occurred and, as its immediate result, urgent trials were suspended at that time.

It is our opinion that under the present circumstances, obesity should be considered as a disease itself and categorized independently. It should not be equated to other risk factors, precisely because of its lengthy deleterious presence. Indeed, the detrimental features of obesity lead to a generalized condition that will ineluctably exert its consequences, in an unpredictable fashion, at the time of a life-threatening situation such as the SARS-CoV-2 infection (1). Consequently, we believe that all obese patients should be hospitalized in high-risk areas and within a humanized model of care.

These events should remind us that the present SARS-CoV-2 pandemics will last for a few more months or until an effective vaccine is developed. Nevertheless, the obesity-related health disaster which is, without hesitation, the cornucopia from which most chronic diseases affecting western societies emanate, will relentlessly continue taking its ominous toll for decades, especially if we continue giving superficial attention to it.

The authors have disclosed that they do not have any potential conflicts of interest.

**Michelle Grunauer, MD, PhD, Jaime Guevara-Aguirre, MD**, School of Medicine, Colegio de Ciencias de la Salud, Universidad San Francisco de Quito, Cumbaya, Pichincha, Ecuador

### REFERENCES

1. Lemyze M, Courageux N, Maladobry T, et al: Implications of Obesity for the Management of Severe Coronavirus Disease 2019 Pneumonia. *Crit Care Med* 2020 May 26. [online ahead of print]
2. Wiebe N, Stenvinkel P, Tonelli M: Associations of chronic inflammation, insulin resistance, and severe obesity with mortality, myocardial infarction, cancer, and chronic pulmonary disease. *JAMA Netw Open* 2019; 2:e1910456
3. World Health Organization: WHO Director-General's opening remarks at the media briefing on COVID-19. 2020. Available at: <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---25-may-2020>. Accessed August 6, 2020
4. Mehra M, Desai S, Ruschitzka F, et al: Hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19: A multinational registry analysis. *Lancet* 2020 May 22. [online ahead of print]
5. Mehra MR, Ruschitzka F, Patel AN: Retraction-hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19: A multinational registry analysis. *Lancet* 2020; 395:1820

DOI: 10.1097/CCM.0000000000004566