

Obesity and the Frailty Syndrome at Period of Covid-19

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ABSTRACT

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Editorial

The geriatric syndrome of frailty is a physical weakness condition defined by complex multifactorial instability and loss of physiological reserve [1-4]. It is related to clinical manifestations and an elevated risk of injury, higher use of health care and mortality [5,6]. An objective interpretation of the phenotype of frailty, including weight loss, slowness, fatigue, poor tolerance for exercise and weakness, has indeed been suggested. Three of these frailty markers were known to characterize the complete frailty syndrome, while the existence of one or two frailty syndromes was known to be linked to an increased risk of frailty. By using concept, the frequency of various illnesses, like heart failure, atherosclerotic diseases and diabetes mellitus, has been shown to be higher in older adults with frailty.

While obesity is well documented to be correlated with disability [7], its relationship with frailty syndrome was much less evident, especially when frailty is regarded a debilitating disorder [8,9] and weight loss is a probable but not required element of frailty syndrome. In particular, there's really discussion about misunderstanding, since being overweight can greatly contribute to slowness and poor tolerance for exercise. There are, furthermore, many reasons to postulate a link between obesity and frailty based on physiology. First, in obese patients with a disparity between fat and muscle, many studies have discovered a specific syndrome of "sarcopenic obesity" [10-13]. This syndrome is termed to be directly associated with reduced especially with the rising mobility disability [10]. Second, biomarkers correlated with frailty are higher in overweight people, especially inflammatory markers such as C-reactive protein (CRP) and interleukin-6 [3,14]. Current news has shown that even there are low carotenoids in overweight/obese

patients [15]. A "obese frailty" syndrome may be suggested because of all of these correlations, but little experimental evidence have been ready to evaluate this theory. An exceptionally higher BMI was found in fragile older adults in a detailed analysis of certain physicochemical measures correlated with the frailty phenotype than in someone who is not frail or were pre-frail [16].

The long-term physiological effects of infection with SARS-CoV-2 (Severe Acute Respiratory Syndrome Coronavirus) are not understood. It is possible to ignore the potential of COVID-19 to induce chronic disease, sarcopenia, and physical functional decline and go beyond the expected respiratory consequences [17]. In fact, in COVID-19 patients, the cytokine system is considered to have a short life expectancy due to a higher inflammatory response [18]. In general, we clearly emphasize that prevention efforts for frailty/sarcopenia will improve the attack to COVID-19 as well as exercise, diet and vitamin (D) supplements [18]. In addition, incorporating nutritional strategies, lifestyle improvements and therapies that can improve muscle architecture and function is important. Recovery measures should be launched as fast as possible, considering that elderly individuals have a lower capacity to recover muscle loss after disuse. It is interesting to note that resistance exercises have indeed been widely acknowledged for enhancing muscle mass, strength, and function in older people. Resistance training should therefore be an essential aspect of the requisite public health education programs to minimise the impact of the COVID-19 quarantine on the security of the muscle tissue. We may theoretically direct governments to prevent a behavioral disorder and recovery crisis post-COVID-19 by providing a variety of home-based interventions, particularly resistance exercise,

greater protein intakes and supplementation. These techniques can also serve as effective preventive measures to minimize the risk of sarcopenia overall and in the event of potential isolation periods.

Disclosure Statement

The authors declare that there are no conflicts of interest.

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