

Frailty is a risk factor for negative outcomes in older adults affected by COVID-19

A fragilidade é um fator de risco para desfechos negativos em idosos acometidos pela COVID-19

La fragilidad es un factor de riesgo de resultados negativos en ancianos afectados por el COVID-19

Frailty is associated with age-related declines in several physiological systems, causing greater vulnerability to sudden changes in health status before a small stressful event. It affects 50% of people aged 85 years or older and correlates to several negative outcomes, such as falls, delusions, reduced functional capacity, need for care, hospital admission, and hospitalization in a long-term care institution. It is also associated with genetic, environmental, and epigenetic factors that, together, cause cellular and molecular damage that accumulate throughout aging, reducing physiological reserve in different systems¹.

Frail older adults are greatly affected by stressful events on both health and functionality, having greater difficulty to recover. They have immunosenescence, which is the decline of the immune system associated with aging, thus becoming more susceptible to contracting infectious diseases, such as COVID-19, and developing worse outcomes, including increased risk of death and decreased functionality².

Older adults severely affected by COVID-19 who require hospitalization, sedation, mechanical ventilation, treatment with high doses of various drugs, bed rest, and other interventions to stabilize and to cure the disease can suffer great impact on health and develop or aggravate frailty during hospitalization³.

Besides direct and indirect injuries caused by SARS-CoV-2, hospitalized patients can also suffer from negative effects from the period of hospitalization in intensive care units, including physical impairments—such as reduced trophism, muscle strength, and function—and cognitive and mental changes that persist for several months after hospital discharge. Hospitalization affects the treatment of severe COVID-19 in older adults more than in young people and is associated with long periods of hospital stay and bed rest, besides the consequences of post-intensive care syndrome.

Several studies have followed the symptoms of post-COVID-19 syndrome or long COVID, finding more than 50 symptoms that may be long-term, including fatigue, dyspnea, chest pain, cough, among others. Few studies have investigated the post-COVID-19 syndrome in frail older adults despite the high prevalence of frailty at hospital admission, especially among female (75%) and older patients (85% aged 85 years or older).

Frailty can be both a predictor and a negative outcome of COVID-19 since it is associated with a higher risk of in-hospital death or development of a disability. Moreover, previously robust older adults could develop this condition during hospitalization. Therefore, frailty may be an outcome of COVID-19 in older adults while frail older adults can progress to worse outcomes. Screening for previous frailty or frailty during hospitalization is thus essential for the specific care of this vulnerable population..

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