Orthogeriatrics

Frailty and Sarcopenia

M. Vandewoude

M. Vandewoude, MD, PhD, Department of Geriatrics, University of Antwerp, Belgium

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ABSTRACT

Frailty is a clinical state with multiple causes and contributors that is characterized by diminished strength, endurance, and reduced physiologic function that increases an individual's vulnerability for developing increased dependency and/or mortality when exposed to a stressor. Frailty is either physical or psychological or a combination of the 2 components, and is a dynamic condition that can improve or worsen over time. Two approaches to defining physical frailty have become popular. The deficit model consists of adding together an individual's number of impairments and conditions to create a Frailty Index (Rockwood model). The second model originally defined a specific physical phenotype consisting of a constellation of 5 possible components (weight loss, exhaustion, weakness, slowness, and reduced physical activity), which marked an underlying physiologic state of multisystem and energy dysregulation (Fried model). Both of these definitions are currently used to define a frail and a prefrail state, a condition between frail and nonfrail.

Sarcopenia is the loss of muscle mass with reduced muscle strength and function. The definition of the phenotypic model of frailty includes several components of sarcopenia such as weakness and slowness. Although sarcopenia may be a component of frailty, the latter is more multifaceted than sarcopenia alone.