Topical Collection

Molecular Mechanisms and Current Treatment Strategy of Sarcopenia and Cachexia

Message from the Collection Editor

Two common but distinct conditions characterized by a loss of skeletal muscle mass are sarcopenia and cachexia. Muscle wasting is an inevitable part of aging (sarcopenia). Cachexia is associated not only with chronic diseases, most commonly cancer, but also with other inflammatory conditions, such as chronic obstructive pulmonary disease (COPD), heart failure, chronic kidney disease, AIDS, and sepsis.

Sarcopenia and cachexia occur due to a multifactorial process that involves physical activity, nutritional intake, metabolic homeostasis, oxidative stress, hormonal changes, and life span. The specific contribution of each of these factors is unknown, but more recent studies have indicated an apparent functional defect in autophagy-dependent signaling in both sarcopenic and cachectic muscles. Since many researchers try to elucidate the molecular mechanism of sarcopenia and cachexia, recent understanding is very broad.

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Cells has become a solid international scientific journal that is now indexed on SCIE and in other databases. We have successfully introduced a special issues format so that these issues serve as mini-forums in specific areas of cell science. Cells encourages researchers to suggest new special issues, serve as special issues editors, and volunteer to be reviewers. Our main focus will remain on cell anatomy and physiology, the structure and function of organelles, cell adhesion and motility, and the regulation of intracellular signaling, growth, differentiation, and aging. We are open to both original research papers and reviews.

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