All Bones and No Meat: Advances in the Management of Cancer Cachexia (SA535)

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Objectives
- Discuss the mechanisms of anorexia and cachexia.
- Discuss the evolving definitions of anorexia and cachexia and the assessment tools available for clinical practice and research.
- Summarize evidence-based treatment strategies, with particular emphasis on novel therapeutics.

The cachexia-anorexia syndrome (CAS) is a multifactorial syndrome characterized by involuntary loss of skeletal muscle and fat, decreased quality of life, and shortened survival. Although typically associated with cancer, CAS is also common in many chronic illnesses, such as heart failure, chronic obstructive pulmonary disease, human immunodeficiency virus infection, and renal and hepatic failure. Over the past few years, significant progress has been made toward our understanding of the pathogenesis of this syndrome, resulting in the development of novel therapeutics.

Anorexia can be classified as (a) primary anorexia, which is mediated by inflammatory cytokines, such as tumor necrosis factor, interleukin 1, and interleukin 6 and various anorexigenic factors, such as leptin, cholecystokinin, and peptide YY; and (b) secondary anorexia related to various comorbidities, such as mucositis, early satiety, nausea, taste alteration, and dysphagia. In addition to central effects on the hypothalamus causing loss of appetite, CAS is also a peripheral phenomenon characterized by wasting of muscle and fat due to an imbalance between the catabolic mediators (e.g., cortisol, glucagon, adrenalin, cytokines) and anabolic mediators (e.g., growth hormone, insulin, testosterone). Given the high prevalence of CAS, it is important to routinely assess common nutritional impact symptoms and to monitor body composition. Although megestrol acetate and corticosteroids have some activity against anorexia, they have significant side effects and limited effect on lean body mass. Emerging therapies for CAS include selective androgen receptor modulators, ghrelin analogues, and cytokine inhibitors that show preliminary evidence for improving appetite, lean body mass, function, and quality of life. In this session, we aim to 1) provide a better understanding of the pathophysiology for anorexia and cachexia, 2) review the latest consensus definition and assessment tools, and 3) discuss up-to-date therapeutic strategies in managing this devastating syndrome. The last 10 minutes will be available for questions and discussions.