A recent multinational survey study demonstrates that the recognition and treatment of cancer cachexia is lacking among oncology health care providers (HCPs) (Ann Oncol [published online ahead of print October 17, 2016]. doi: 10.1093/annonc/mdw420).

Cancer cachexia has been defined by an international consensus as a multifactorial syndrome including ongoing loss of muscle mass (with or without loss of fat) that cannot be completely reversed by conventional nutritional support and leads to progressive functional impairments (Lancet Oncol. 2011;12:489-495). This same consensus defined the diagnostic criteria as weight loss >5% over the past 6 months or weight loss >2% in individuals already demonstrating depletion according to current body weight and height (body mass index < 20 kg/m²) or skeletal muscle mass. Cancer cachexia has been shown to decrease quality of life and tolerance of anticancer treatment, and to be the cause of death in up to 20% of patients with cancer.

Researchers set out to better understand the awareness, understanding, and treatment of cancer cachexia among HCPs.

**Study Details**

Three surveys were sent to oncology HCPs. The inclusion criteria for the surveys varied slightly, but all participants had to have oncology as a primary specialty, treat a substantial number of patients with cancer, and be involved in the management of cancer cachexia. A total of 742 HCPs responded from 14 different countries (541 HCPs, 125 HCPs, and 76 HCPs, respectively, for surveys 1, 2, and 3). When asked to provide a definition, cancer cachexia was most often cited as being weight loss (86%) and loss of appetite (46%). Some 27% of respondents defined it as muscle wasting/loss of body mass. Symptoms that were most commonly thought to be part of cancer cachexia were weight loss (97%), loss of appetite (93%), failure to thrive (92%), and muscle wasting (91%).

“Many oncologists think that a cachectic patient is a profoundly wasted and almost moribund patient. Cachexia is not to be seen as unavoidable, but rather as a partially preventable cancer comorbidity.”
—Maurizio Muscaritoli, MD

**KEY POINTS**

- Cancer cachexia appears to be underrecognized and undertreated by oncology HCPs in a multinational study.
- Cancer cachexia is a poor prognostic indicator that can profoundly affect well-being and the ability to tolerate cancer treatments.
- Early identification of and intervention for cancer cachexia are needed as well as more effective treatments.
patients is still difficult to eradicate, particularly among oncologists worldwide,” says Dr. Muscaritoli. “Many oncologists think that a cachectic patient is a profoundly wasted and almost moribund patient. Cachexia is not to be seen as unavoidable, but rather as a partially preventable cancer comorbidity. Therefore, treatment of cachexia should not be considered peculiar of palliative care medicine.”

“Concordant with this study’s findings, in my experience, cancer cachexia is highly underrecognized,” says Eric Roeland, MD, director of clinical research in symptom intervention and assistant clinical professor of oncology and palliative medicine at the University of California at San Diego. “Most patients and even clinicians believe cachexia is only about weight loss. However, we have been learning over time that cachexia is about body composition changes. For example, losing muscle and gaining fat and water. These changes start very early in the course of advanced cancer and can lead to increased treatment-related toxicities and poor quality of life.”

Clinical Implications
The study authors believe their results indicate that there are varying perceptions worldwide of cancer cachexia. Furthermore, although HCPs are aware that weight loss and loss of appetite are symptoms, there is a lack of recognition of cancer cachexia as a negative prognostic factor and patients are not diagnosed until late in their disease, when the impact of cachexia on their well-being, quality of life, and even survival outcomes already may be substantial. “Early diagnosis and early implementation of nutritional and metabolic support may counteract cancer cachexia and help prevent weight and muscle loss, thus improving patients’ outcome. For this to happen, education is mandatory to increase physicians’ awareness of cachexia and its treatability,” says co-author Alessio Molfino, MD, PhD, who also is a professor of internal medicine at Sapienza University of Rome.

A European task force position article from 2014 (Ann Oncol. 2014;25:1492-1499) stated the need for a multipronged approach, including better nutritional support and novel pharmacologic agents for management. Dr. Muscaritoli adds that although an “anticachexia pill” does not yet exist, there are several agents currently under development that may target some of the mechanisms involved in the pathogenesis of cachexia. “However, whatever the new drug is/will be, multimodal treatment, including appropriate nutrition and physical exercise, appear mandatory to counteract cachexia, besides optimal cancer treatment,” he concludes.

Dr. Roeland agrees and says that with our growing understanding of the biology of cancer, there has been a parallel increase in our understanding of the inflammation and endocrine changes that occur with cancer cachexia.

“The FDA [US Food and Drug Administration] currently mandates that all pharmacologic interventions in this space show an improvement in lean body mass and physical function,” Dr. Roeland says. “One promising drug is anamorelin, which may be approved in Europe for cancer cachexia and did increase lean body mass in a phase 3 study. Notably, this lean body mass increase occurred in metastatic lung cancer patients receiving chemotherapy. I expect more data to become available in the future, which hopefully will change its current approval issues in the United States.”

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