Management of Anorexia, Cachexia, and Weight Loss in Patients With Advanced Cancer

Diane G. Cope, PhD, ARNP-BC, AOCN®


Study Summary

The purpose of this multi-institutional, double-blind, randomized study was to assess the efficacy of dronabinol (Marinol®, Unimed Pharmaceuticals, Deerfield, IL) administered either alone or in combination with megestrol acetate (Megase®, Bristol-Myers Squibb Oncology, Princeton, NJ) in comparison to megestrol acetate for cancer-associated anorexia. Patients with advanced cancer (N = 469) who had an estimated life expectancy of more than three months with an Eastern Cooperative Oncology Group performance status of 0–2 and a self-reported weight loss of at least five pounds during the preceding two months were randomized to one of three treatment arms: (a) megestrol acetate liquid suspension 800 mg orally daily plus capsule placebo, (b) dronabinol 2.5 mg capsule orally twice a day plus liquid placebo, or (c) a combination of both medications at the same doses. Patients completed the North Central Cancer Treatment Group questionnaire to assess appetite and weight, the single-item Uniscale to assess quality of life (QOL), and the Functional Assessment of Anorexia/Cachexia Therapy (FAACT) instrument and were weighed at baseline, weekly for four weeks, and then monthly. Patients continued on treatment as long as they or their physicians thought it was beneficial or until toxic side effects occurred.

Results indicated that no significant difference existed between the three arms in median time on study or median survival. An increase in appetite was reported by 75% of the patients in the megestrol acetate group, 49% of the patients in the dronabinol group, and 66% of the patients in the combination group. Physician-reported weight gains of 10% or greater from baseline weights were measured in 14% of the megestrol acetate group, 5% of the dronabinol group, and 11% of the combination group. Results from the Uniscale found no significant difference in QOL between the three treatment arms. The physical and emotional constructs of the FAACT instrument found a significant difference between the megestrol acetate and the dronabinol groups, with the patients on megestrol acetate having better QOL in these constructs. No significant difference existed between the treatment arms in reported toxicities, including nausea, vomiting, neurocortical dysfunction, edema, ascites, pleural effusion, or thromboembolic events. A significant difference was found in male impotence in the megestrol acetate group in comparison to the dronabinol group (18% versus 4%).

Applications to Patient Care

- Study findings suggested that megestrol acetate provides superior anorexia benefit with greater appetite improvement and weight gain in comparison to dronabinol or combination therapy.

In addition, the majority of toxicities were not significantly different between the treatment arms. A significantly higher percentage of male impotence was found, however, in the megestrol acetate group. Oncology nurses must be aware of these study findings so they can educate patients and provide accurate responses to patient questions. When starting megestrol acetate therapy, oncology nurses should inform male patients that impotence could occur. Nurses also may use this opportunity to review patients’ current dietary intake patterns. Patients and caregivers should be instructed about dietary suggestions specifically for individuals who are experiencing anorexia and weight loss. This may include a list of high-calorie foods, nutritional supplements, and suggestions for small, frequent meals.

- Study findings indicated that patients taking megestrol acetate had significant improvement in the physical and emotional QOL constructs compared with those taking dronabinol.

The researchers noted that despite extensive research involving the use of megestrol acetate for anorexia, few prior studies have noted improvement in QOL. They suggested that the improvement in the physical and emotional QOL constructs observed with patients in the megestrol acetate treatment arm may be a result of the FAACT instrument’s greater emphasis on anorexia. Furthermore, anorexia is a complex issue and also may be associated with other common issues for patients with cancer, such as depression, stress, coping, taste changes, fatigue, or nausea. In patients with advanced cancer, QOL is critical when life expectancy is limited. Nurses should be aware of patients’ personal assessments of QOL and assist patients in achieving a peaceful, satisfying end of life.

Diane G. Cope, PhD, ARNP-BC, AOCN®, is a nurse practitioner at the Florida Cancer Specialists in Fort Myers, FL. (Mention of specific products and opinions related to these products do not indicate or imply endorsement by the Clinical Journal of Oncology Nursing or the Oncology Nursing Society.)

**Study Summary**

The purpose of this qualitative study was to explore the meaning of oral intake cessation, as described by primary caregivers, in adult in-home hospice patients with cancer. The sample consisted of 12 adult women who had cared for patients who had ceased oral intake. The interviews were conducted during the first year of bereavement. The following seven themes emerged from the data analysis:

1. The meaning of food theme described the role of food in daily life, social and relational situations, health, and illness. The caregiver as sustainer theme described the caregivers' experiences and observations during the patients' behavioral changes toward food and the physical changes in appearance from weight loss. Caregivers struggled with respecting patients' wishes and encouraging intake. Concurrent losses described the caregivers' changes and decisions because of the patients' decreasing intake. Caregivers, faced with patients' physical weakness and loss of independent mobility, were forced to seek assistance in the home. Additionally, caregivers performing intimate physical care for patients resulted in a loss of privacy and a perceived loss of dignity for patients. The theme of personal responses described both patient and caregiver experiences. Caregivers reported that some patients ate to please their families. Caregivers' dietary intake patterns also changed. Caregivers sought minimal information about decreasing intake until patients' intake had stopped completely. Caregivers reported that information about this process would have been helpful in understanding and dealing with their responsibility to get their patients to eat. The ceasing to be "starved to death" theme described the caregivers' reactions to physical death when the body "stopped" in comparison to social death when patients were no longer able to communicate. Being bereaved—the meaning now theme described caregivers' reflections and current meaning of the experience. Changes in eating patterns persisted for some of the participants. The final theme, paradox, described the caregivers' vacillation in thinking from "eating is best" to "not eating is best."

Findings from the seven themes indicated that food has a deeper meaning than just a resource for physical life and is symbolic in personal relationships. Caregivers shared their prior expectations and the changes that occurred as they lived the experience of caring for terminally ill patients with cancer.

**Applications to Patient Care**

- **Study findings suggested that oncology nurses should perform ongoing assessments of patients' dietary patterns and caregiver roles.**

  The meaning of food for both patients and caregivers may vary and change over time as patients experience chemotherapy, radiation, surgery, or advanced cancer. Therefore, oncology nurses should perform ongoing assessments of individual attitudes and feelings regarding appetite and eating patterns throughout the cancer diagnosis, treatment, and end-of-life processes. Furthermore, patients and caregivers may have personal values or cultural beliefs about food that should be identified. Often, food is viewed as a correlate to health. The situation can become frustrating for both patients and caregivers as patients and caregivers may not be emotionally ready to accept this type of information, providing written materials may assist them in the future. An awareness of the process of intake cessation may help caregivers understand that this may be a normal progression for patients who are terminally ill. This also may assist in alleviating any disagreements between patients and caregivers regarding food intake.

- **The author emphasized the need for further research about intake cessation.**

  Although several literature reviews about anorexia have been published, minimal research has been conducted in this area. The management of anorexia, cachexia, and weight loss in patients with cancer is a major challenge for patients, caregivers, and oncology nurses. The results of the quantitative and qualitative studies presented in this article provide evidence that the nursing management of patients' dietary problems extend beyond the administration of medication to improve patients' appetites and also should address patient and caregiver responses and quality of life. To provide evidence-based practice, research regarding caregiver information needs, patient nutritional intake patterns, and cultural differences should be conducted.

**Author Contact:** Diane G. Cope, PhD, ARNP-BC, AOCN®, can be reached at cope@attglobal.net.