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Editorial

Blazing a trail in cancer cachexia care

Cancer cachexia is a condition of severe weight loss and muscle wasting that can occur in patients with any form of cancer. Patients with this condition require greater effort to maintain physical function and weight. If left untreated, oral intake falls below nutritional requirements, leading to rapid deterioration of muscle strength and ambulatory ability, making it difficult for patients to perform everyday activities such as climbing stairs or continuing their hobbies and occupations. Eventually, the patient becomes physically unable to tolerate cancer treatment, requires nursing care for daily activities, and dies earlier than expected.

As our understanding of the underlying pathogenesis improves, several pharmacotherapies are being developed.[1] These agents are designed to target specific molecules associated with decreased appetite or anabolic/catabolic imbalances in muscle or adipose tissue. However, pharmacotherapy alone has never been able to improve physical function, overall survival, or quality of life. A theoretical model of multimodal intervention proposed by Fearon[2] suggests that pharmacological, nutritional, exercise, and psychosocial interventions are all essential components of an effective treatment plan. However, the model remains an incomplete puzzle. A recent global survey of healthcare provider education needs for cancer cachexia (GENESIS-CC) found that only one-third of respondents felt confident in caring for patients at risk of or with cancer cachexia.[3] Subsequent Japanese subgroup analysis[4] revealed large interprofessional differences of barriers in all domains of confidence, knowledge, perception, practice, and education, with pharmacists and nurses having the greatest barriers to cachexia care. Based on this situation, this *Asia-Pacific Journal of Oncology Nursing (APJON)* special issue focused on multidisciplinary care to shed light on the unmet needs in cancer cachexia care. Eminent experts from many fields and countries contributed excellent articles on psychosocial/holistic perspectives, nutritional intervention, exercise intervention, pharmacotherapy, and health system modeling. Following are some highlights from this special issue.

Fuji et al. discussed the role of pharmacists in cancer cachexia.[5] Until now, there has been no model of multidisciplinary team care in cancer cachexia in which pharmacists have a solid role. In recent years, however, pharmacists have played an increasingly important role in the supportive care team. Pharmacist-led medication reconciliation is being implemented in a growing number of countries to reduce prescribing errors, increase medical safety, and practice team-based care. Collaborative drug therapy management was introduced in the United States and the United Kingdom in the late 1900s, and protocol-based pharmacotherapy management was introduced in Japan in 2020 and is now actively recommended. In cancer cachexia, several drugs such as anamorelin HCl, megestrol acetate, olanzapine, corticosteroids, and eicosapentaenoic acid are used as single agents or in combination; cannabinoids may have clinical applications as shown by Emily et al.[6]; and novel agents such as anti-GDF-15 antibodies are under investigation. Therefore, pharmacists will play an increasing role in the team-based management of cancer cachexia, which is expected to become more complex in the future.

Koji et al. proposed a holistic, multimodal care model for the role of the oncology nurse in the multidisciplinary care of cancer cachexia.[7] Among all healthcare providers, nurses are closest to patients and caregivers and play a central role in self-care education, as discussed by Hopkinson.[8] They also play a central role in team care, linking patients with oncologists and palliative care physicians, pharmacists, nutritionists, rehabilitation therapists, psychotherapists, social workers, and dentists/dental hygienists, and serving as a "hub" to integrate health care. However, education about cancer cachexia is inadequate in current nursing education.[3,4] It is essential to establish an education system for nurses regarding cancer cachexia and to introduce new educational models, including the Human Response to Illness Model presented by McClement.[9]

In addition, there are still unmet societal challenges. Just as there are disparities in cancer treatment, there are also disparities in supportive care.[10] Health outcomes are extremely poorer in socioeconomically disadvantaged individuals who have low income, low education, lack of social support, language barriers, or rurality than their counterparts. Gabriella et al.[11] reported an instructive case of a 46-year-old Javanese woman with severe malnutrition and cancer cachexia due to untreated breast cancer for three years. The patient's home visit, correction of an incorrect cultural briefing, development of locally available nutritional therapies, and persistent efforts to maintain a dialogue led to successful nutritional therapy and cancer treatment. This case demonstrates that a healthcare provider's passion and efforts can improve a patient's quality of life, no matter how difficult the situation.

Finally, Prerna et al.[12] proposed a unique model for the medical system that emphasizes the use of operations management tools to optimize care delivery and improve outcomes in cancer cachexia care. The model is designed to help healthcare providers address the complexities of cancer cachexia and improve patient quality of life by streamlining care processes, promoting multidisciplinary collaboration, using data-driven decision-making, standardized assessment and monitoring, patient-centered care, and efficient resource allocation.

Cancer cachexia care is now entering a new phase. How can we appropriately combine new and old pharmacotherapies, nutrition, exercise, and psychosocial support into a feasible model, and how can we test the outcomes of this model and implement it in medical society? The unique and outstanding articles in this *APJON* special issue will help us find answers to these questions. This process is truly "Blazing a trail where there is none."

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