Advances in early diagnosis and treatment have contributed to the prolonged lifespan of cancer patients [1]. Cancer diagnoses have increased to such an extent that it has been classified as a chronic disease and is considered a possible diagnosis within an individual’s lifespan [2]. Even so, cancer is still considered a rare and catastrophic disease [3]. For this reason, the physical complications caused by cancer and cancer treatments remain a relevant field of study [1].

The fundamental goal of rehabilitation is to minimize disability and prolonged effects caused by various diseases; the ultimate goal is improved quality of life and complete recovery of physical function [4-6]. This definition is in accordance with the goals for recovery from physical complications caused by cancer. After a cancer diagnosis, the treatment process is usually pre-determined, and physical problems can often be predicted; this makes cancer treatment planning different from other diseases [7]. Therefore, cancer rehabilitation is a category on its own and allows specialized targeted approaches.

Problems with the physical functions of cancer patients are very diverse because types of cancer and the treatment methods applied to each patient are different. For example, lymphedema may appear in patients with breast, gynecologic, and urinary cancers; respiratory complications in patients with lung cancer; and cachexia in patients with pancreatic cancer [8-12]. More effective treatment methods are continuously being developed. The patient’s physical function will also change throughout the course of treatment and recovery, and the goals and methods of rehabilitation should change accordingly. Therefore, cancer rehabilitation specialists cannot use a universal treatment plan. Treatment plans for common and predicted problems that occur regularly in cancer patients, as well as specialized plans that can be adapted for each clinical situation, have to be implemented.

As cancer rehabilitation takes its place, recent trends are classified into four categories. The first relates to specific issues unique to each case. Initially, patient management was limited to reporting the clinical symptoms and treatment effects. However, recent animal studies, newly developed mechanisms, and the validation of new treatments have brought about a change. For example, studies on lymphedema have mostly been focusing on the therapeutic effects, such as physical therapy; however, studies on lymphangiogenesis and other methods for treating edema are being actively conducted through animal experiments [13-18].

The second trend is the expansion of the scope of rehabilitation according to the type of cancer. New rehabilitation methods are being investigated and applied in clinical practice. For example, adapting respiratory reha-
bilitation for patients with lung cancer [19,20]. In addition, the focus of rehabilitation during certain treatment phases is changing [21]. Rehabilitation programs focus on a specific period within the treatment schedule, such as hematopoietic stem cell transplantation in patients with hematological cancer or rehabilitation in patients with advanced cancer [1,22-24].

The third trend involves rehabilitation with the goal of returning to society. In particular, the focus is on the care of cancer patients to take place in nearby hospitals or at home. This form of rehabilitation is an extension of hospice care for end-of-life patients [25-27].

Finally, prehabilitation, which is also common in other fields, is an important factor in cancer rehabilitation. Very often, complications in physical function in cancer patients can be predicted. Preoperative rehabilitation and continuous education before and during treatment can aid in preventing these problems [28-30]. Prehabilitation is an emerging field that provides various rehabilitation services to patients and has proven successful.

The same trends were used in the establishment of physical medicine. There are opportunities for various developments and expansions within the cancer rehabilitation field that can allow patients additional services and treatments. With the development of social media, patients have easy access to information on cancer rehabilitation programs. Considering the progression in cancer treatments and the rapidly changing cancer rehabilitation approaches, we can be sure that the field of cancer rehabilitation will keep evolving.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

ACKNOWLEDGMENTS

This work was supported by the Korea Medical Device Development Fund, a grant funded by the Korean governments (the Ministry of Science and ICT, the Ministry of Trade, Industry and Energy, the Ministry of Health & Welfare, the Ministry of Food and Drug Safety) (Project No. 9991006938, KMDPR_20200901_0273).

REFERENCES

Recent Trends in Rehabilitation for Cancer Patients


