Nursing & Primary Care

Navigation Nursing in Head and Neck Radiotherapy

Ülkü saygılı^{1*} and Gülbeyaz Can²

¹Istanbul University - Cerrahpaşa, Graduate Education Institute, Internal Medicine Nursing PhD Student, Istanbul, Turkey.

²Istanbul University - Cerrahpasa, Florence Nightingale Nursing Faculty, Istanbul, Turkey. *Correspondence:

Ülkü Saygılı, Istanbul University - Cerrahpaşa, Graduate Education Institute, Internal Medicine Nursing PhD Student, Istanbul, Turkey.

Received: 04 November 2020; Accepted: 23 November 2020

Citation: Ülkü saygılı, Gülbeyaz Can. Navigation Nursing in Head and Neck Radiotherapy. Nur Primary Care. 2020; 4(6): 1-4.

ABSTRACT

Head and neck region; The most complex parts of the human body anatomically and histologically. It is the place where vital functions such as swallowing, chewing and speaking are carried out and our five senses are located. At the same time, this region is our visual identity that appears at first glance, where we express ourselves, our emotions, and which we display to the outside world. Head and neck cancers are in a wide range including lip, oral cavity, larynx, nasopharynx, oropharynx, hypopharynx, and salivary gland tumors. Worldwide, every year 400,000-600,000 new cases emerge as one of the major global health problems, with approximately 400,000 deaths. Radiotherapy is accepted as an effective treatment approach for BBC, but it brings many acute and chronic side effects together with concurrent chemotherapy. These side effects caused by the disease and the treatments applied cause difficulties in maintaining daily life activities and changes in the quality of life. Navigation; it is a healthcare model designed to address the health problems experienced by patients, and the various barriers they may encounter as they progress through the healthcare system. It is known that continuity of care and consultation is very important in oncology patients, but the intensity of care and treatment, distribution of symptom management among different units, and ensuring continuity of care become very difficult. In this difficult care process of the patients, it is very important that the navigator nurses not only control the side effects of the treatment, but also provide comforting care about the disease and its treatment. Therefore, this review was conducted to evaluate nurse navigation in the management of symptoms in patients with head and neck cancer receiving radiotherapy.

Keywords

Head and Neck Cancers, Navigation nursing, Radiotherapy, Symptom management.

Introduction

Although head and neck cancers (BBC) are in lower ranks than other malignancies in terms of prevalence both in the world and in our country [1], changes in vital activities such as hearing, taste, smell, vision, speech, chewing, swallowing and daily life due to disease and treatment. It changes the daily life activities of the patients considerably due to the difficulties in maintaining their activities. Also; because the region is adjacent to anatomical structures such as the central nervous system, cranial nerves and eye, loss of function develops due to local invasions and the patient's quality of life is adversely affected [2,3].

Standard treatment of BBC; It may vary depending on the localization, stage, and operability of the tumor [4]. Radiotherapy (RT), one of the main treatment methods, is used for primary treatment (stage I and II) for small tumors, adjuvant therapy for larger tumors (stage III and IV), and palliative treatment in unresectable or recurrent tumors [5,6]. While the goal of preoperative radiotherapy is to reduce tumor size to allow resection, the goal of postoperative radiotherapy is to remove tumor cells that cannot be surgically removed to minimize the possibility of local recurrence. While surgery or RT alone is sufficient in the early stage without regional lymph involvement, simultaneous chemoradiotherapy (CRT) is preferred in cases where the tumor's anatomical location limits surgery [3,7]. Side effects occurring during and after treatment emerge as a very serious problem, especially with the use of combined treatment schemes [1,8]. According to the results of the study, mortality related to treatment in chemoradiotherapy

increases up to 2% [9]. Arising side effects; The total dose, fraction dose, width of the treatment volume, the length of the treatment period, the stage of the disease, the application of radiotherapy or surgery (preoperative or postoperative), surgical techniques and chemotherapy may vary depending on many factors. Mucositis [8,10,11], nutritional deficiency [12,13], decreased taste and salivary secretion, erythema and desquamation of the skin in patients who received radiotherapy due to BBC; In the late period, complications such as atrophy, telangiectasia, ulceration, fibrosis, trismus, edema, necrosis and dental caries occur in the skin and mucous membranes [14].

As a result; With the treatments and side effects of the treatments, different physiological and psychosocial needs arise in many patients, and treatment and care become difficult [3,7]. Since the intensity of care and treatment and symptom management are distributed among different departments, it is very difficult to ensure the continuity of care [15]. In this difficult care process of patients, it is very important that oncology nurses not only control the side effects of the treatment, but also provide comforting care about the disease and its treatment, and provide psychosocial assistance in a way that helps patients cope with the disease [15,16]. When evaluated in terms of the patient; Navigation in the health system is a difficult process, especially for patients who face multiple barriers in accessing healthcare. Navigation; It is a healthcare intervention designed to address various barriers that patients may encounter as they progress through the healthcare system [17].Navigator nursing has been developed to meet the needs of patients, and the navigation program aims to help patients understand their illnesses and treatments. With the role of navigator, the nurse contributes to increase the quality of care and to positively affect the physical, psychological and social well-being of the patient. As a result of the navigation nurses participating in the care in the field of oncology; it provides an opportunity for an earlier intervention to side effects and complications of cancer and its treatment [18].

Today, although there is research on the prevention and treatment of symptoms in patients receiving radiotherapy, there is no standard in nursing navigation for patients with head and neck cancer who receive radiotherapy due to the varying effectiveness of different care practices and agents used to relieve symptoms. Understanding illness behavior, psychological reactions and adaptation difficulties in sick individuals and planning navigation that will support the development of appropriate coping methods are very important [15,16].

Navigation Concept

The term navigation comes from the Latin root. Navis; ship is to drive, if Navigation is to travel safely, pass through or navigate safely. The first patient navigation program was initiated in 1990 at New York Harlem Hospital. The navigation service established here is designed to reduce care differences and provide standardization in cancer-related situations. The designed model; It continues to develop and expand and emerges as a promising approach for cancer treatment [19].

Nursing Navigation

The term "nurse navigator", which has been frequently encountered in the field of oncology in recent years, is actually under the category of 'patient navigator'. In the studies conducted, it was reported that patient managers were mostly nurses. The role and responsibilities of a navigator are more or less similar to case management, patient education, social work and advocacy. The Oncology Nursing Association (ONS) defines the Oncology navigator nurse as "a professional nurse with clinical knowledge specific to oncology, providing individualized assistance to patients, families and caregivers to overcome barriers in the health system".

An oncology navigator nurse using the nursing process; provides training and resources to provide quality health care services in a timely manner at all stages of cancer. Studies, including patientreported results, provide expanding evidence to support the implementation of the oncology nurse's navigation processes. Navigation programs and processes cannot be duplicated; it has been reported that studies are limited, lack of standard navigation roles, insufficient job and process definitions, and lack of knowledge, training, preparation and experience of the oncology navigator nurse [20]. In literature instead of navigator nursing; cases manager, clinical coordinator, cancer support nurses, follow-up nurses, breast specialist, breast cancer coordinator, and patient director. As a result of the participation of specialist nurses in the field of oncology, regardless of their names; it provides an opportunity for an earlier intervention to side effects and complications of cancer and its treatment [18].

Patient Education in Nursing Navigation

Nursing navigation is especially planned for symptom management and patient education. Patient education in nursing navigation; It is designed to influence changes in knowledge, attitude and behavior to encourage patients to cope with problems [15,19]. Education; It should include general information about illness, treatment, side effects of treatment, practical help to reduce anxiety and improve self-care. Patients receiving RT require continuous training during treatment. In addition to signs and symptoms, the duration and treatment of treatment side effects should be included in the education.

Teaching should be done individually or in a group setting, using a variety of sources such as oral information, written information, video or demonstration. Patient and family education, which must be conducted in a multidisciplinary manner, is an important aspect of patient care, because most of the patients' knowledge of radiation is negative, and radiotherapy is a frightening concept for patients. Turning these emotions into a positive experience is a challenge for the RT team. For patients with head and neck cancer, communication is often affected by tumor invasion or anatomical changes resulting from surgery. Patients may be in the early stages of speech therapy and may not speak clearly; therefore, these situations require a patient and empathetic approach. Navigator nurse; they should encourage patients to write down their questions and concerns and provide sufficient time for this to happen [21].

Nursing Navigation in the Management of Head and Neck Radiotherapy Related Symptoms

Health care services are insufficient to meet the needs of patients and their families in terms of psychosocial support, continuous care, taking necessary precautions and coordination. Mucositis [8,10,11], nutritional deficiency [12,13], decreased taste and salivary secretion, erythema and desquamation of the skin in patients who received radiotherapy due to BBC; In the late period, complications such as atrophy, telangiectasia, ulceration, fibrosis, trismus, edema, necrosis and dental caries occur in the skin and mucous membranes [14]. As a result; With the treatments and side effects of the treatments, different physiological and psychosocial needs arise in many patients, and treatment and care become difficult [3,7].

Since the intensity of care and treatment and symptom management are distributed among different departments, it is very difficult to ensure the continuity of care [15]. In this difficult care process of patients, it is very important that oncology nurses not only control the side effects of the treatment, but also provide comforting care about the disease and its treatment, and provide psychosocial assistance in a way that helps patients cope with the disease [15,16].

When evaluated in terms of the patient; Navigation in the health system is a difficult process, especially for patients who face multiple barriers in accessing healthcare. Navigation; It is a healthcare intervention designed to address various barriers that patients may encounter as they progress through the healthcare system [17].

It is known that continuity of care and consultation are very important in oncology patients, but the intensity of care and treatment, distribution of symptom management among different units, and ensuring continuity of care become very difficult [15-19]. In this difficult care process of patients, it is very important that oncology nurses not only control the side effects of treatment, but also provide comforting care about the disease and its treatment, and adopt an approach that will support the patients' coping with the disease [19-24].

References

- 1. Jin S, Cong M, Zhang L, et al. Validation of a simple diet self-assessment tool SDSAT in head and neck cancer patients undergoing radiotherapy. Eur J Oncol Nurs. 2020; 44: 101702.
- 2. Cruz FOdAM, Ferreira EB, Vasques CI, et al. Validation of an educative manual for patients with head and neck cancer submitted to radiation therapy. Revista latino-americana de enfermagem. 2016; 24.
- Cengiz M, Çetingöz R, Garipoğlu M, et al. editors. Baş Boyun Tümörler. İzmir Türk Radyasyon OnkolojisiYayınları. 2017; 165-212.
- 4. Alterio D, Marvaso G, Ferrari A, et al. Modern radiotherapy for head and neck cancer. Semin Oncol. 2019; 46: 233-245.
- 5. Rose P, Yates P. Quality of life experienced by patients receiving radiation treatment for cancers of the head and neck.

Cancer Nursing. 2001; 24: 255-263.

- 6. Burri RJ, Lee NY. Concurrent chemotherapy and radiotherapy for head and neck cancer. Expert review of anticancer therapy. 2009; 9: 293-302.
- Demiröz C, Özşahin EM. Skuamöz Hücreli Baş Boyun Kanserinde Kemoradyoterapi. Uludağ Üniversitesi Tıp Fakültesi Dergisi. 2011; 37: 61-65.
- 8. Yarom N, Hovan A, Bossi P, et al. Systematic review of natural and miscellaneous agents, for the management of oral mucositis in cancer patients and clinical practice guidelinespart 2 honey herbal compounds saliva stimulants probiotics and miscellaneous agents. Support Care Cancer. 2020; 28: 2457-2472.
- Zini EM, Lanzola G, Quaglini S, et al. A pilot study of a smartphone-based monitoring intervention on head and neck cancer patients undergoing concurrent chemo-radiotherapy. Int J Med Inform. 2019; 129: 404-412.
- 10. Yamauchi K, Kogashiwa Y, Moro Y, et al. The effect of topical application of royal jelly on chemoradiotherapy-induced mucositis in head and neck cancer A preliminary study. International journal of otolaryngology. 2014; 2014: 974967.
- 11. Sonis ST. Oral mucositis in head and neck cancer risk biology and management. Am Soc Clin Oncol Educ Book. 2013.
- 12. Johansen J, Petersen GB, Andersen JR. Predictive factors of critical weight loss during radiation treatment in head-and-neck cancer patients. 2009.
- 13. Kubrak C, Olson K, Baracos VE. The head and neck symptom checklist[©] an instrument to evaluate nutrition impact symptoms effect on energy intake and weight loss. Support Care Cancer. 2013; 21: 3127-3136.
- 14. Özsaran Z, Yalman D, Yıldırım G, et al. Baş-Boyun Kanseri Tanısı İle Radyoterapi GörenOlgularda Geç Yan Etkilerin Değerlendirilmesi. Turkiye Klinikleri Journal of Medical Sciences. 2003; 23: 195-199.
- Fillion L, de Serres M, Cook S, et al. Professional patient navigation in head and neck cancer. Semin Oncol Nurs. 2009; 25: 212-221.
- Chiang SH, Ho KY, Wang SY, et al. Change in symptom clusters in head and neck cancer patients undergoing postoperative radiotherapy A longitudinal study. Eur J Oncol Nurs. 2018; 35: 62-66.
- Freeman HP. Patient Navigation A Community Based Strategy to Reduce Cancer Disparities. Journal of Urban Health. 2006; 83: 139-141.
- Toprak FU, Vural G. Jinekolojik Onkolojide Navigasyon ve Navigatör. Journal of Anatolia Nursing and Health Sciences. 2016; 19.
- 19. Chillakunnel Hussain Rawther S, Pai MS, Fernandes DJ, et al. A Randomized controlled trial to evaluate the impact of a Nurse Navigator Programme on outcomes of people with breast cancer study protocol. Journal of Advanced Nursing. 2017; 73: 977-988.
- 20. ONS. Oncology Nurse Navigation Role and Qualifications. Oncol Nurs Forum. 2015; 42: 447-448.
- 21. Clarke KL, Dropkin JM. Head and Neck Cancer Oncology Nursing Society. 2005.

- 22. Doğan MD. Baş Boyun Kanserleri İçinde Onkoloji Hemşireliği. Edt.Can G. 2015; 583-592.
- 23. Moslemi D, Nokhandani AM, Otaghsaraei MT, et al. Management of chemo/radiation-induced oral mucositis in patients with head and neck cancer A review of the current literature. Radiother Oncol. 2016; 120: 13-20.
- 24. Trotti A, Bellm LA, Epstein JB, et al. Mucositis incidence severity and associated outcomes in patients with head and neck cancer receiving radiotherapy with or without chemotherapy a systematic literature review. Radiother Oncol. 2003; 66: 253-262.

© 2020 Ülkü Saygılı & Gülbeyaz Can. This article is distributed under the terms of the Creative Commons Attribution 4.0 International License