

Foot Reflexology Application in Lung Cancer Patients and Nausea-Vomiting

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ABSTRACT

Lung cancer is the most frequently seen cancer type globally. Patients who have lung cancer and who get treatment, often complain about nausea and vomiting. Although antiemetic drugs are used for avoiding/eliminating nausea/vomiting in these patients, development of nausea and vomiting cannot be avoided. In recent years reflexology applications aimed for symptom management of cancer patients is attracting attention. Foot reflexology application is preferred as stimulation points are near the skin surface. In this application with special rubbing movements which are applied to the feet, energy being blocked at certain parts of the body is being released and body's self-healing power is being activated. In this way energy channels of the body are opened and relaxation is obtained while nausea-vomiting are reduced.

INTRODUCTION

Lung cancer is the phenotypic reflection of genetic mutation which occurs as a result of cellular proliferation of air path epithelium cells in an uncontrolled way. Lung cancer which is defined as the epidemic disease of our age ranks in the first row in the world with a death ratio of 19.4% [1,2].

Nausea is described as a disturbing situation which is felt in epigastrium; back part of the throat and along the abdomen with a feeling of fluctuation and vomiting is defined as extraction of stomach content in a strong way through the mouth. Nausea often comes before vomiting or it develops together with it [3]. Nausea-vomiting is one of the symptoms from which patients having lung cancer and getting treatment often complain about [4]. In the treatment of lung cancer, chemotherapeutic agents with medium or high level of emetogenic risk are often used (Cisplatin, Carboplatin, Vinblastine, etc.). These agents cause various disturbing symptoms such as bone marrow depression, mucositis and nausea-vomiting, the intensity of which varies from mild level to the level which threatens life [5-7]. Despite very effective medical treatments such as serotonin antagonists which are used in recent years for avoiding and controlling nausea-vomiting, nearly 50% of cancer patients experience at least one of the "acute", "delayed" or "expected" nausea-vomiting incidents. Besides nearly 38-80% of patients experience severe level of nausea-vomiting while 20% of patients refuse or delay their treatment due to nausea-vomiting [8,9]. Nausea-vomiting incidents which cannot be controlled cause undesired symptoms such as sweating, tiredness, hypotension, anorexia, dehydration and weight loss. Besides they can also reduce absorption and extraction of medicines that are used in the treatment. Furthermore,

frequency, intensity, duration and disturbance level of nausea-vomiting incidents that are experienced during the day, disrupt social lives of patients, increase their fear and worries, cause for difficulties to arise while they do their daily activities and life qualities are seriously reduced [5,6,10,11].

Reflexology application for reducing or avoiding nausea and vomiting in cancer patients is used nowadays in an increasing way. International Reflexology Institute has defined reflexology as "A technique which is applied at reflex points located in the hands, feet and ears as being related with all secretory glands, organs and body parts, by hand and which helps in normalizing the body functions" [12,13]. At the same time reflexology is a special pressure technique and energy balancing system which is realized by applying pressure on reflex points with rubbing, patting and pressing movements in order to provide healing. With the pressure that is applied energy blockage is released and as a result it is enabled for free energy flow to spread in a balanced way to the related organs. While reflexology applications make up an integral treatment method comprising the body and the soul, it is also one of the most frequently used methods in complementary medicine [11,14-

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17]. At the same time reflexology activates natural healing mechanisms of the body and it provides advanced level of relaxation. As it is indicated in literature, reflexology helps contractions that push the chewed food through the digestive tract by functioning the reflexes of the digestive system from mouth to stomach with the stimulation of reflex points of the digestive system [15,18].

It is stated that reflexology applications are among the most frequently used (35.2%) complementary therapy methods by the cancer patients who are newly diagnosed and that they have positive effects in reducing nausea-vomiting in cancer patients and in improving functional life [19,20]. As the stimulation points are near the skin surface, most effective way of applying reflexology is related with feet reflexology. There are specific points in the feet where each body organ is being reflected. It is thought that the pressure which is applied at these points can balance all body energy. These points are connected with energy channels, regions, meridians, interior organs and structures. It is considered that in disease incidents, these energy channels in the body are blocked [21]. Since the pressure being applied to reflex areas are effective in the absorption and reduction of calcium, lactate, and uric acid, this process is named as "detoxification". Foot reflexology application is different from foot massage and it includes more superficial contact and deep pressure at certain areas of the foot (**Figure 1**). The pressure which is applied to reflex points with special hand and finger techniques enables for stress to be reduced and it causes physiological changes in the body. With this method, self-healing mechanism of body is activated and a physiological relaxation is achieved in the body [21,22]. By opening the energy channels, reflexology reduces stress as being similar to mental-physical therapies and by enabling relaxation and homeostatis, it avoids nausea-vomiting [15,18].



Figure 1. Certain movements which are used in foot reflexology application [18].

DISCUSSION

It is stated that many patients experiencing nausea-vomiting despite antiemetic treatment application in cancer patients, applied for foot reflexology applications and that reflexology

reduced nausea-vomiting in cancer patients [19,23-25]. By stimulating reflex points in digestion system, foot reflexology application stimulates the reflexes of digestion system from the mouth to the stomach and it helps with the contractions that push the chewed food along the digestive tract [26]. In a doctorate thesis in which the effect of foot reflexology application in lung cancer patients on nausea and vomiting is evaluated, it was found out that foot reflexology application reduced nausea-vomiting (experience, formation, disturbance) [27]. Yang [28] has determined that reflexology applications had positive effects in reducing nausea and vomiting; while Ozdelikara and Tan [26] has found out that foot reflexology application in breast cancer patients mitigated nausea-vomiting and gagging (experience, formation, disturbance). At the same time foot reflexology application creates a strong therapeutic impact with the patient; it reduces pain, facilitates harmonization with the disease and improves the harmonization strength. Because touching enables to have a more open and sincere relationship with the patient, it creates an unbiased environment and it improves communication, interaction and patient satisfaction [29].

CONCLUSION

As a conclusion, foot reflexology was found to have positive effects the on nausea-vomiting of lung cancer patients receiving chemotherapy. Foot reflexology application, the usage of which is increasing in lung cancer patients, can be used as supportive for reducing/avoiding nausea and vomiting.

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