ARTYKUŁ REDAKCYJNY
EDITORIAL ARTICLE

MODERN METHODS OF TREATMENT IN PALLIATIVE CARE

NOWOCZESNE METODY LECZENIA W OPIECE PALIATYWNEJ

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ABSTRACT

The palliative care patient is definitely a unique type of patient. Due to the complexity of the symptoms requires a holistic therapeutic approach. Modern methods of treatment in palliative and hospice care underline an important role of physio, kinesiotherapy and pharmacological treatment coexistence. The rehabilitation reduces clinical symptoms, accompanying the basic disease and increases the quality of life of palliative patients and their families. It becomes an inseparable element of treatment, both in outpatient care as well as in stationary care and home care. Due to the high dynamics onset of cancer in the group of geriatric patients there is a need for a broader analysis of the topic. The goal of palliative care is to achieve the best possible quality of life for patients and their families.

KEY WORDS: geriatrics, palliative and hospice care, physiotherapy, kinesiotherapy

STRESZCZENIE

Pacjent w opiece paliatywnej jest zdecydowanie wyjątkowym typem pacjenta. Ze względu na złożoność objawów wymaga holistycznego podejścia terapeutycznego. Współczesne metody leczenia w opiece paliatywnej i hospicyjnej podkreślają ważną rolę współistnienia fizjoterapii, kinezyterapii i leczenia farmakologicznego. Rehabilitacja zmniejsza objawy kliniczne towarzyszące chorobie podstawowej i podnosi jakość życia pacjentów paliatywnych i ich rodzin. Staje się nieodłącznym elementem leczenia zarówno w opiece ambulatoryjnej, jak i w opiece stacjonarnej i domowej. Ze względu na wysoką dynamikę zachorowań na raka w grupie pacjentów geriatrycznych istnieje potrzeba szerszej analizy tematu. Celem opieki paliatywnej jest osiągnięcie jak najlepszej jakości życia pacjentów i ich rodzin.

SŁOWA KLUCZOWE: geriatria, opieka paliatywna i hospicyjna, fizjoterapia, kinezyterapia

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INTRODUCTION

The world of marketing and advertising, Internet and the latest media technology favours the understanding of suffering and hospice care as an exceptionally negative period. In such a perspective, efforts should be made to trigger sensitivity to suffering in young people, in particular the suffering of a person requiring hospice and palliative care, understood in the holistic dimension.

Physical therapy, also known as physiotherapy is an integral part of the basic therapy. Acording to the definition it is one of the allied health professions that, by using mechanical force and movements (bio-mechanics or kinesiology), manual therapy, exercise therapy, and electrotherapy, remediates impairments and promotes mobility and function.It has also found a significant place among the treatment methods used in the group of elderly and terminally ill people, due to the progressing medicalization and saving human life to the end, as well as the tendency to significantly reduce the symptoms associated with the basic disease. It influences the alleviation of clinical ailments and improvement of quality of life in case of palliative patients.

DYSPNOEA

Very serious symptom in the course of cancer is dyspnoea. This breathlessness may result from the very essence of cancer, as well as from the accompanying pathology of the respiratory system. Cancer dyspnoea is a symptom of lung cancer, which can occur on its own or in the course of other diseases. Dyspnoea is defined as a subjectively noticeable difficulty in breathing. It is a very individual feeling, which depends on many factors, among others: the mechanism of dyspnoea development, mental and physical condition of the patient, and his family and social

situation. 70% of oncological patients in the last weeks of life suffer from this symptom [1]. The most common cancers that cause dyspnoea directly include: lung cancer, colorectal cancer, breast cancer and prostate cancer. The aetiology of dyspnoea in oncological patients varies, but in lung cancer patients dyspnoea is the result of closure of large airways or significant reduction of gas exchange surfaces by infiltration of large parts of the pulmonary parenchyma or by compression from the outside in the course of exudate to the pleura. In patients with lung cancer the feeling of dyspnoea occurs in 60-70% of patients. Depending on the type of cause, different forms of causal treatment of dyspnoea are used, e.g. brachytherapy or drainage of the pleural cavity. In case of narrowing or closure of the upper respiratory tract or bronchi, palliative radiotherapy is used, and in rare cases chemotherapy with cytostatic drugs. The use of drugs reducing dyspnoea is a supportive treatment, the first-line drug may be morphine, which acts in a way that reduces the symptoms of dyspnoea and has an analgesic effect. It is worth remembering that non-pharmacological procedures reducing symptoms of dyspnoea, physical therapy, relaxation techniques and increased air humidity play an important role, and in case of indications - oxygen therapy, which can bring relief from dyspnoea. In respiratory therapy, active exercises of respiratory muscles, techniques of respiratory relaxation, learning the correct respiratory tract, as well as learning effective cough are used. [2] In case of patients with lung cancer, exercises according to the POCHP concept often play an important role together with the accompanying PNF [3]. The development of an appropriate respiratory mechanism results in increased chest activity during breathing, increased chest expansion, reduced stagnant capacity and the possibility of better expectoration. Activation of the smaller thoracic muscle or the Sternocleidomastoid increases muscle elasticity, improves cage motion mechanics and increases inspiratory volume [4]. In advanced cancer, weakened respiratory muscles cause secretion build-up and impediment to breathing. In case of patients undergoing chemotherapy or radiotherapy, neuromobilisation or visceral techniques are necessary. In case of bedridden patients, breathing exercises, mobilisation of ribs, diaphragms and shoulder blades are particularly important. In case of oncological patients, increased dyspnoea is often associated with fear of death due to an increased lack of air. Therefore, proper preparation of the patient through the development of specific positions to facilitate breathing, as well as proper breathing exercises and education of the patient in the field of proceeding is extremely important [5]. Physiotherapy in palliative care of patients with respiratory disorders is carried out in hospitals as well as at home, due to respiratory insufficiency and secretion retention, respiratory tract cleaning techniques are very important. As the American Thoracic Society emphasizes, this form of proceeding is extremely important in lung diseases. Pulmonary rehabilitation is a multidisciplinary care program for patients with chronic respiratory disorders that is individually tailored and designed to optimize physical and social performance and autonomy [6]. The ATS mentions four basic elements of pulmonary rehabilitation: [7]

1. Strength training (upper limb endurance training, low limb endurance training, strength training and respiratory muscle training),
2. Education (breathing strategies, energy saving and job simplification, end-of-life training),
3. Psychosocial behavioural intervention (stress management strategies, stress management)
4. Evaluation of the result.

It has also been noted by Lanken and colleagues that respiratory rehabilitation includes physical training, psychosocial support, nutritional therapy and self-education, including breathing strategy, use of additional oxygen, pharmacological therapy (to alleviate airway obstruction) and panic control. [8] L. Nici and colleagues state that American Thoracic Society and the European Respiratory Society have confirmed exercise training as a comprehensive component of pulmonary rehabilitation to achieve effective control of dyspnoea [9].

LYMPHOEDEMA

Lymphoedema is a very important problem in cancer patients. The aim of the therapeutic methods used is to improve the quality of life [10]. It may occur as a complication of anticancer treatment or as a result of disease progression. Lymphatic oedema occurs when a protein rich fluid is drained from the intercellular space through the lymphatic system in too small amount in relation to the amount produced. Lymphatic capillaries are present in the intercellular spaces, responsible for the filtration of part of the blood plasma and the formation of intercellular fluid. 90% of this fluid returns to circulation through capillary veins, while 10% is absorbed into capillary lymphatic vessels becoming lymphatic. Among the components of the intercellular fluid, proteins penetrate into the lymphatic vessels and return to the circulation through the lymphatic system. Lymphatic vessels transport the lymph to large venous vessels. Lymphatic vessels, such as the chest and lymphatic duct, collect lymph from the whole body, connect with each other and form two large lymphatic vessels. As a result of damage or closure of individual structures forming the lymphatic system, the removal of the intercellular fluid is impaired, which results in the accumulation of fluid and proteins that are not discharged to the lymphatic vessels. There is primary and secondary lymphoedema. The first one is associated with congenital anatomical defects of this lymphatic system. It is not related to cancer. Secondary lymphoma occurs in case of patients with cancer as a result of lymphatic damage after surgery, radiotherapy or as a result of the development of cancer. Lymphoedema most often concerns patients with malignant breast cancer, cancer of the urinary tract, prostate cancer, melanoma, lymphoma, as well as gynecological cancers such as cancer of the vulvar lips or ovary. Lymphatic oedema concerns especially women after mastectomy, and occurs in 20% of

women with mastectomy with removal of axillary lymph nodes [11]. Lower limb oedema is usually associated with urinary tract cancer, prostate cancer, melanoma, lymphoma and gynecological cancers. It may occur shortly after lymph node removal surgery or after a longer period of time after the end of the therapy. Its occurrence may be affected by the number of removed lymph nodes during surgery, e.g. removal of ten or more lymph nodes during mastectomy increases the probability of oedema in relation to people in whom only one guard node has been removed. Other factors influencing the above process include radiation therapy in the armpit, groin, pelvis, supraclavicular fossa, which leads to radiation fibrosis of tissues and loss of elasticity of lymphatic vessels. Lymphoedema is three times more common in overweight people with BMI of 30 or more. In addition, a tumor located in the pelvis or abdominal cavity may cause compression of the lymphatic vessels of the thoracic duct and increase of oedema. Lymphoedema significantly reduces the functioning of patients and their quality of life. Its location, especially in the upper or lower limb, makes it difficult to perform basic activities that are important for the patient. Increased volume of the limb and increasing disability often cause a decrease in self-esteem, cause depression, and even lead to social and professional isolation of the patient. Bacterial infections that often accompany lymphoedema cause recurrent inflammatory states and lymphoedema of the skin and subcutaneous tissue. If untreated, this condition may lead to the development of lymphatic hemangioma or epidermal cancer. Lymphoedema is the main indication for physical therapy [12]. In the course of oncological treatment, advanced renal failure, anaemia, corticoids and NLPZs exacerbate the oedema. According to the guidelines of the International Society for Lymphology, physiotherapy is the basic method of treating the lymphoedema. Comprehensive drainage therapy is used, including lymphatic drainage, multi-layer bandaging, exercises to improve lymphatic drainage and skin care [13].

Comprehensive lymphoedema therapy includes manual lymphatic drainage, drainage therapy, compression therapy (multi-layer bandage), movement therapy with breathing exercises, skin care and protection. Supplementary physiotherapy includes pneumatic compression therapy, aquavibron massage and kinesiotaping. Kinesiotaping is a method of wrapping a selected area of the body with a special patch, which is a source of mechanical stimuli. It reduces pain, reduces swelling and relaxes muscle tension. Another method of improving blood circulation is a therapeutic massage, the aim of which is to improve blood and lymph circulation and speed up the treatment of inflammatory conditions. It has a very positive effect on spine and joint pains. Acupuncture, consisting in puncturing biologically active zones of the body, has a positive effect on the functioning of internal organs. The McKenzie method is also used to treat swelling, including exercises to reduce pain of an overload, functional or structural disorders. In addition, the PNF method is applied, based on the reconstruction of lost function in the process of learning movement, muscle control and motor coordination. Another method is manual therapy, based on compression and manipulation, aimed at restoring proper positioning of discs and intervertebral structures in the spine. [14] Post-isometric muscle relaxation is aimed at relaxing muscles that are in a state of contraction, as well as eliminating pain points. In order to qualify for treatment in patients with cancer, an individual assessment of the patient should be made, depending on the patient's condition and physical fitness. CDT modification is also used, giving up the lymphatic drainage [15]. In the above-mentioned methods of treatment, oedema therapy through multilayer bandaging is extremely important. The first layer is a sleeve/backet with a protective function. The hand or foot should be pressed together by bandaging each finger separately, then a second layer of dressing, sometimes a soft bandage with a protective layer. There are different materials for bandaging, either a polyurethane sponge or a combination of different materials to adapt to the surface of the body. The third layer of the dressing in patients with lymphoedema consists of low stretch bandages applied in a spiral, eight-way with a tortoise-turtle girth around the joints, with the principle of pressure gradation. Low stretch bandages provide low rest pressure, so they can also be used at night [16]. [The method of compression therapy depends on the physical condition of the patient, as well as his or her physical and mental capacity. Today, knee- socks, stockings or compression sleeves are used as materials for compression therapy. In an advanced disease process, simultaneous pharmacotherapy is used, especially medicines that improve lymph and blood flow. In the application of complex physiotherapy of lymphatic oedema, it should be kept in mind that lymphatic drainage should be performed through circular, rotational, pumping and drawing movements [17]. It is worth emphasizing that drainage should be used starting from areas not engulfed in oedema and then proceeding to drainage of the oedematous part. There are many discussions on the use of simultaneous lymphatic drainage and compression therapy. Some part of physiotherapists are of the opinion that they can be used as two separate treatments, while others believe that they should be applied in sequence, first lymphatic drainage and then compression therapy. The use of musculoskeletal techniques stretching the skin, subcutaneous connective tissue and deep fascia also facilitates proper movement of the fascia [18]. The role of kinesiotaping in lymphoedema is also discussed. This discussion is still open. There are reports about the possibility of replacing bandaging with kinesiotaping, especially in patients intolerant to pressure. Kinesiotaping relaxes the skin, improves tissue mobility, increases lymph outflow and thus reduces pain and improves quality of life. Absolute and relative contraindications should be taken into account when qualifying patients with cancer for kinesis- and physiotherapy procedures. Absolute contraindications are: deep vein thrombosis, subcutaneous tissue inflammation, increased readiness for pulmonary embolism, past pulmonary or peripheral embolism. Relative contraindications are: advanced NYHA third and fourth degree circulatory insufficiency, peripheral

circulatory disorders, advanced peripheral atherosclerosis, unstable ischemic heart disease and diabetes [19]. When educating a patient with lymphoedema, it is important to remember to explain in detail how compression therapy is used, as well as the psychological support of the person concerned. Massage is sometimes used in lymphoedema by means of a pneumatic massage device, consisting of a multi-chamber sleeve producing variable pressure [20]. It should be noted that the lymph flow is supported by active exercises used in conjunction with breathing exercises, mobilising the function of the muscle pump and simultaneously creating a negative pressure in the chest. Resistance and isometric exercises are not performed. The main priority in the treatment of lymphoedema is to improve the patient's quality of life. Lymphoedema may also appear in the lower extremities in patients who have not been diagnosed for a long time with a progressive cancer process on the part of genitourinary organs, i.e. it is a cancer mask [21]. [A serious problem is the coexistence of lymphoedema in patients with coexisting lymphatic flow disorders and simultaneous rheumatoid disease. Lymphatic dysfunction in patients with RA in itself hinders normal lymphatic flow and thus intensifies the already existing disorders of lymphatic flow.

CONSTIPATION AND DIARRHEA

Constipation and diarrhea are very important problems in case of cancer patients. They may be the result of a primary disease, or may result from the use of chemotherapy or radiotherapy. Fecal constipation in cancer patients may also be a result of medication affecting gastrointestinal peristalsis [22]. The occurrence of recurrent diarrhoea or constipation adversely affects the course of treatment, as well as the quality of patients' life. Diarrhoea is much more common in patients shortly after radiotherapy and chemotherapy. They cause dyselectrolytemia with progressive weakness and cachexia in people, in whom the cancer process causes adverse effects. Diarrhoea may also result from coexisting inflammation of the intestinal mucosa. Apart from diarrhoea and constipation in patients with advanced cancer, 40-70% of patients complain about nausea and vomiting in the course of this disease. Nausea is an unpleasant subjective feeling, often coexisting with symptoms of the autonomic nervous system. Pale skin layers, cold sweat, salivation and tachycardia often accompany them. Vomiting is the rapid ejection of gastric contents through the mouth or nose, with a large volume of food. Vomiting is a complex process of reactions that involves coordinated action of the gastrointestinal tract, diaphragm and abdominal muscles. Nausea and vomiting can also be complications of the therapy used. Treatment of these symptoms can be divided into two groups. The first group is pharmacological treatment; the second group is non-pharmacological treatment. In non-pharmacological treatment the role of physiotherapy is observed, it is used to modify the risk factors of constipation, significantly reduces musculoskeletal imbalance and increases intestinal peristalsis [23]. An oncological patient staying in bed for a long time is threatened by habitual constipation due to lack of movement and thus impaired intestinal peristalsis. Within the treatment of these disorders we use musculoskeletal, relaxing and kinesiotaping techniques, classical massage of abdominal shells with stroking, rubbing and kneading. Improvement techniques such as: respiratory therapy, working with ribs, diaphragm and release of the upper chest opening. All this allows for quick uprightening of the patient. When recommending this method, the patient should be examined very carefully, bearing in mind the existence of contraindications such as gastrointestinal obstruction, inflammatory processes in the abdominal cavity, physical therapy in less than 6 weeks after abdominal irradiation, as well as abdominal pain of unknown aetiology [24].

FATIGUE ASSEMBLY

Cancer-related fatigue (CRF), according to M. P. Davis and colleagues, is a symptom or syndrome that affects the majority of cancer patients. Davis and colleagues claim that more than 30% of cured people report symptoms of fatigue and more than 90% of cancer patients at an advanced stage of the disease have symptoms of fatigue [25]. It should be assumed that this process is related to the course of the basic disease, it is not related to fatigue alone, as it should be assumed. Factors exacerbating the occurrence of fatigue syndrome are also side effects occurring during the treatment of cancer. The problem of the feeling of continuous fatigue, as well as the subjective feeling of insufficiency accompanying the disease, definitely negatively affects the quality of patient's life. Considering the nomenclature of the disease, fatigue syndrome according to the ICD classification is not a single symptom, but their syndrome. CRF criteria according to this classification include significant fatigue, reduced energy or increased demand for rest and at least 5 accompanying symptoms. These symptoms are: general weakness, heavy limbs, weakened concentration, decreased motivation, sleep disorders, lack of regeneration after a night's rest, the need to constantly overcome fatigue, emotional reactivity to the feeling of being tired, limitations in daily activity caused by fatigue, short term memory disorders, prolonged exhaustion after workout. These criteria are met if they occur daily or almost daily for 2 weeks during the last month. Evidence that fatigue syndrome is associated with cancer or on-going treatment and the symptoms are not a consequence of pre-existing mental disorders is also necessary to diagnose CRF. There is a discrepancy between the feeling of fatigue reported by the patients themselves and the opinion of oncologists. According to N. J. Vogelzang and colleagues [26] and S. Neveli and colleagues [27] it is clearly visible that in case of patients, the fatigue syndrome is the main symptom affecting their quality of life, while oncologists believe that pain is by far the main factor negatively affecting their life quality. Many patients do not raise the problem of fatigue during medical appointments. G. A. Curt and colleagues claim that young

people, i.e. under 65 years of age, are more likely to talk about it. [28]. Older people raise the problem of fatigue in a small percentage. In many publications it can be seen that oncologists themselves do not raise this problem. Oncologists recommend different ways of opposing fatigue, such as appropriate diet, vitamins, mood-enhancing drugs, and they do not attach importance to exercise. Fatigue syndrome in cancer can have physical and mental aspects. In the physical aspect, according to Fatigue Coalition studies, patients complain about a decrease in effort tolerance, a feeling of fatigue, often accompanied by nausea, vomiting as a consequence of treatment. It should also be noted that there are significant changes in the mental aspect, i.e. concentration and memory disorders. Patients with CRF are often marginalized by themselves, unwilling to participate in social life, do not maintain mutual relations, and often isolate themselves in professional life. According to reports, in patients who were assessed for quality of life on the basis of the HRQL survey, it can be observed that all aspects that were reflected in the survey are impaired in the course of fatigue syndrome [29]. The proceeding in case of fatigue syndrome can be divided into pharmacological and non-pharmacological proceeding. In pharmacological treatment, it is required to remember about the treatment of coexisting diseases, such as: anaemia, circulatory insufficiency, coexisting metabolic and electrolyte disorders, coexisting hypothyroidism, as well as any accompanying infections. In the course of this process, in addition to pharmacological treatment, non-pharmacological treatment is an option. Above all, physiotherapy should be taken into account in this treatment. R. K. Portenoy created an algorithm of management for patients complaining about fatigue in the course of cancer. In non-pharmacological treatment, the "6E" rule is important: education, energy conservation, exercise, energyrestoration, easingstress, eatingwell [30]. It is believed that explaining to the patient and broadly understood education will allow for good communication with the patient, which is a basic factor in the applied therapy. Side effects occurring during cancer treatment often become the main cause of fatigue syndrome. It can be stated that a high-protein diet, ensuring proper albumin levels, has a positive effect on fatigue syndrome, while deficiency, increase in inflammatory parameters, vitamin deficiency and electrolyte disorders intensify these symptoms. It should be emphasized that mental, emotional and social support also plays a very important role in the reduction of fatigue symptoms. The role of interdisciplinary palliative-hospice care teams, both for in-patient and home patients, appears here. Patients with cancer are exposed to constant stress, which adversely affects their mental well-being, as well as aggravates symptoms of anxiety, uncertainty and depression. Patient support in various aspects is extremely important. It is important to emphasize the important role of family and caregivers, who are able to reduce these symptoms through good contact with the patient. Non-pharmacological method of combating fatigue in the course of cancer is motor activation. According to the guidelines of the National Comprehensive Cancer Network (NCCN) concerning the management of CRF, a recommendation has been added to start motor activation at the moment of diagnosis [31]. In the fatigue syndrome in cancer patients, in addition to the physiotherapy used, the administration of pharmacological drugs such as glucocorticoids, erythropoietin, antidepressants or progestagens, which eliminate many other adverse physical symptoms that cause the patient's reluctance to physical activity, should not be forgotten.

SWALLOWING DISORDERS

Another syndrome that adversely affects the regenerative process in the course of cancer is dysphagia. This is a problem related to the difficulty of swallowing food in a patient with gastrointestinal cancer. It may result from damage to the upper part of the gastrointestinal tract, but also from consequences after radiotherapy and chemotherapy, causing functional disorders of the nervous and muscular systems [32]. Swallowing disorders may also result from oral mucositis, pharyngitis and oesophagitis, as well as surgical procedures, which leads to the process of fibrosis and gastrointestinal stenosis. Developing the patient's exercise program to facilitate the evacuation of food from the mouth and the appropriate swallowing process protects patients from the occurrence of aspiration pneumonia. Manual musculoskeletal techniques in the head and chest have a positive effect on maintaining proper muscle tension in the head and neck muscles, and also facilitate proper passage of food. Similarly, breathing exercises affecting the diaphragm muscle, activating the muscles of the cross section of the lumbar and thoracic spine are extremely important for patients who have been hospitalized for a long time and are unable to move [33].

SUMMARY

On the basis of observations it can be seen that in case of oncological patients the subject of motor activation is practically neglected. When recommending motor activation, it should be kept in mind to choose individual exercises taking into account accompanying diseases: cardiological, neurological, haematological. Apart from indications for rehabilitation used in palliative and hospice care, the criteria for exclusion of patients have been distinguished. L. Adamsen and colleagues [34] and F. Dimeo and colleagues [35] defined exclusion criteria for kinesitherapy procedures. These include: diastolic pressure below 45 mmHg and above 95 mmHg, heart rate above 100/min, temperature above 38 degrees, respiratory rate above 20/min, infection requiring antibiotic therapy, active bleeding, platelet levels below 50 g/l, presence of petechiae. The heart rate during exercise should not exceed 60-80% of the maximum heart rate. As time passes, the range of exercises may be increased. Activation of movement can be associated with other methods of treatment and it should be applied at least 3 times a week, its duration depending on individual possibilities - 15-60 minutes. Rehabilitation exercises also have a very positive

effect on the reduction of inflammatory parameters and improvement of mood in this group of patients. It may be interesting to examine the effect of physiotherapy on the prolongation of patients' survival. In cancer patients exercising in groups, aerobic exercises called walking programs, exercises with the use of a cycloergometer, walking on a treadmill, dancing are recommended. The use of aerobic exercises in combination with psychotherapy and pharmacological treatment will improve the patients' quality of life, therefore interdisciplinarity and holistic approach to cancer patients should be taken into account [36]. General exercises and movement can therefore have an analgesic effect, raising the level of endorphins. Campbelli's and colleagues' studies clearly show that patients using K. S. Courneyi's warm-up training, exercises lasting 20 minutes, such as: breathing, general fitness, calming, relaxation exercises, have significantly improved their quality of life [37]. It is also extremely important to improve cardiovascular fitness, breathing, digestion, activation of the skeleton system and other systems. Exercises and movement in patients with cancer, as already mentioned, also have an antifracture effect, consisting in reduction of bone resorption in course of the basic disease. The application of exercises is also very important in antifungal prophylaxis, because continuous activation of patients who have undergone surgical procedures, as well as in patients treated conservatively due to lack of physical activity, there is a high level of embolism readiness. The advantage of physiotherapy in case of oncological patients is the fact that they can perform it at home, e.g. aerobic training on a cycloergometer, or by walking. Physiotherapy in case of oncological patients should be controlled by experienced physiotherapists. The need to individualize the admissible forms of physiotherapy and kinesiotherapy should be taken into account. The problem of rehabilitation in cancer patients is still open. It is worth remembering that active exercises, breathing exercises, exercises on a cycloergometer or treadmill are extremely important from the therapeutic point of view. When choosing a specific form of physiotherapy, as has already been said, attention should be paid to the patient's age, gender, course of basic disease, coexisting diseases, the forms of treatment used, the choice of appropriate time and frequency of exercise. During these procedures it is necessary to monitor the clinical condition, mood and adaptability to a specific type of treatments. As it results from the analysis of the described different reactions occurring in terminally ill patients, the disease has a very large impact on the patient's behaviour and quality of life. It leads to the loss of physical and mental strength, lack of sense of security, inability to take any action. It strengthens the sense of uselessness, addiction, deprives the sense of life. It creates various expectations for care and support from other people. An additional burden that increases suffering is a strong pain, serious ailments, a sense of disability, as well as the awareness that it is a burden for other people. Therefore, the role of rehabilitation in the autumn of life of cancer patients is still an open and widely discussed problem. Research on indications for physico- and kinesitherapy in chronically ill patients suffering from cancer during aging and old age is currently being performed.

This article should be treated as the effect of an analysis of available sources, showing various aspects of rehabilitation in palliative and hospice care. Numerous articles from the medical literature have been used in its creation, where extremely important problems related to the issue of modern palliative and hospice care and the role of rehabilitation in this branch of medicine are discussed. We also used our own medical experience, which gives the possibility of wide observation of this group of patients and different methods of their use.

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