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PALLIATIVE TREATMENT – STILL UNSOLVED PROBLEM

LECZENIE PALIATYWNE – WCIĄŻ NIEROZWIĄZANY PROBLEM

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ABSTRACT

In a modern approach to palliative and hospice care, apart from pharmacological treatment, physio- and kinesiotherapy also play an important role. It affects the reduction of clinical symptoms, accompanying the basic disease and also significantly increase of the quality of life for 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. Thanks to modern forms of physio- and kinesiotherapy, it is possible to adapt therapeutic methods to the individual needs and clinical condition of the patient. Such individualization of treatment in physiotherapy is the main goal of the above methods in palliative and hospice treatment. Due to the dynamics onset of cancer in the group of geriatric patients there is a need for a broader analysis of the topic. The work presents available information of physiotherapy in palliative and hospice care. The problem of relative and absolute indications and contraindications for physiotherapy was discussed. Based analysis of the above topic can lead to the conclusion that there is a necessity undertaking further research on the impact of rehabilitation treatments on reducing patients complaints and improvement of patients life quality.

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

STRESZCZENIE

W nowoczesnym podejściu do opieki paliatywnej i hospicyjnej istotną rolę, oprócz leczenia farmakologicznego, odgrywają fizjoterapia i kinezyterapia. Wpływają one na zmniejszenie objawów klinicznych towarzyszących chorobie podstawowej, a także znacząco podnoszą jakość życia pacjentów i ich rodzin. Stają się nieodłącznym elementem leczenia zarówno w opiece ambulatoryjnej, jak i w opiece stacjonarnej i domowej. Dzięki nowoczesnym formom fizjoterapii i kinezyterapii możliwe jest dostosowanie metod terapeutycznych do indywidualnych potrzeb i stanu klinicznego pacjenta. Taka indywidualizacja leczenia w fizjoterapii jest głównym celem powyższych metod w opiece paliatywnej i hospicyjnej. Ze względu na dynamikę zachorowań na choroby nowotworowe w grupie pacjentów w podeszłym wieku istnieje potrzeba szerszej analizy tematu. W pracy przedstawiono dostępne informacje na temat fizjoterapii w opiece paliatywnej i hospicyjnej. Omówiono problem względnych i bezwzględnych wskazań i przeciwwskazań do fizjoterapii. Analiza powyższego tematu może prowadzić do wniosku, że istnieje konieczność podjęcia dalszych badań nad wpływem zabiegów rehabilitacyjnych na zmniejszenie dolegliwości pacjentów i poprawę jakości ich życia.

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

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THE ROLE OF REHABILITATION IN PALLIATIVE CARE

On the basis of literature data it can be concluded that the majority of cancer cases (70% of cases in men and 60% of cases in women) occur after 60 years of age. The risk of cancer increases with age, reaching a peak in the eighth decade of life [1[1]]. The World Confederation of Physiotherapy (WCPT) defines physiotherapy as: "... Providing services to people and societies to develop, maintain and restore maximum movement and functionality throughout life. Physiotherapy includes the provision of services in situations where movement and proper functioning are at risk of aging, injury or illness. Full and functional movement is the foundation of what it means to be healthy. Physiotherapy deals with the identification and maximisation of motion potential in terms of promotion, prevention, treatment and rehabilitation. Physiotherapy involves interactions between the physiotherapist, patients or clients, families and caregivers" [2].

Physiotherapy is a component of rehabilitation.

According to the World Health Organisation, "rehabilitation is a comprehensive approach to people with physical and mental disabilities, with the aim of restoring full or achievable physical and mental fitness, the ability to work

and earn money and the ability to take an active part in social life" [3]. It should be noted that in the 1970s rehabilitation was treated as the last therapeutic stage. The turn of the 1940s and 1950s was a period of gaining popularity for the method based on prioceptive neuromuscular facilitation (PNF), proposed by Cabat, as well as the methods of A. Petõ, Doman Pohl or V. Vojty. Over the years, it could be seen that rehabilitation in course of various diseases and pathologies began to play an increasingly important role. Never before had it been expected that it would also be extremely important in palliative hospice care which is a special kind of care in patients with geriatric patients [4].

Palliative care, according to the World Health Organisation, is "an action that improves the quality of life of patients and their families facing life-threatening disease problems by preventing and endure suffering through early identification and very careful assessment and treatment of pain and other problems of: somatic, psychosocial and spiritual". [5]

Hospice care, understood as an idea and practical activity, appears to be an extremely important topic in the world of contemporary cultural, mental and social changes. In the world of changing civilization, death is no longer the natural order of things, but a phenomenon that can be controlled and even postponed by means of modern technologies and advances in science. Medicine as a field of activity of a modern man is focused on quick and effective cure, effective fight against disease, and there is no place for people who cannot be restored to health. It should be emphasized that the idea of palliative hospice care itself is a young idea, as shown by the collected literature. The first publications on this subject appeared at the turn of the 1960s and 1970s, and in Poland it began to be written about in the 1980s [6]. Palliative care is an active, comprehensive care of a patient whose disease does not respond to causal treatment. The priority is to control pain, other symptoms and psychological, social and spiritual problems. The aim of palliative care is to achieve the best possible quality of life for patients and their families. This includes combating hard-to-manage pain and other somatic symptoms, alleviating mental, spiritual and social suffering and supporting the family of patients, both during illness and orphanhood. Palliative care is a specialised medical service. Palliative care is an important factor in connecting the community of sick people with healthy people who are able to offer themselves to others [7].

One of the main principles on which palliative hospice care is based is the principle of reciprocity. It gives the feeling that the help offered to others returns to us when we need it. The development of the modern hospice and palliative care owes much to the vision, courage and commitment of Lady Cicely Saunders. In the St. Christopher hospice she founded, in a surprisingly short period of time, she led to the transformation of this area of health care and met the challenge of opposing the previously established negative attitudes and prejudices. It has revolutionised the way in which we meet the diverse needs of the dying, the sick and their families. Thanks to it, modern palliative care is not limited to institutional care, but is rather a philosophy of care that is applied in all incurably ill people's places of residence.

The definition of palliative care has been developed over many years, as it has developed in many countries under a variety of conditions. The European Society for Medical Oncology Palliative Care Working Group (ESMO) distinguishes between basic definitions: [8]

1. Supportive treatment, the aim of which is to obtain the greatest possible comfort, possibility of functioning and social support for patients and their families at every stage of the disease and treatment.
2. Palliative care refers to the stage when the disease is incurable.
3. End-of-life care is palliative care as we approach death.
4. Supportive treatment is the broadest term to include other terms.

Palliative care and physiotherapy seem to be seemingly different fields of medicine, but the common goal of both is to improve the quality of life. On the basis of literature review and studies in terminally ill people it can be seen that one of the elements of interdisciplinary symptomatic treatment in palliative care is physiotherapy. It improves the quality of life by relieving troublesome symptoms that limit its functioning [9]. Taking into account the type of disease, as well as indications and contraindications for its use, it should be remembered that physiotherapy in palliative medicine, being an integral part of its treatment, must not harm the patient. Palliative care uses rehabilitation procedures in the field of kinesis- and physiotherapy, therapeutic massage, comprehensive lymphedema therapy, as well as various forms of orthopaedic supplies. According to the literature, it is estimated that on average 40% of palliative care patients benefit from physiotherapy, of which more than 50% are very positive [10]. With more and more scientific reports on rehabilitation in palliative care, reliable studies developed in accordance with the principles of evidence-based medicine (EBM) are predominant.

Physiotherapy in palliative care patients can be provided in hospital, outpatient and community environment. Physicotherapists are an integral part of a multidisciplinary palliative care team, improving the quality of life and functions [11]. It is worth emphasizing that the designated physical and kinesitherapy methods should be adapted to the patient's clinical condition and to each phase of the patient's illness. This problem requires an in-depth analysis of the patient's condition, the severity of the disease, as well as indications and contraindications to the proposed procedures. A person tired of the course of the cancer process should be motivated to use movement exercises, positively influencing the elimination of the above-mentioned symptoms. Multi-centre studies confirm the purposefulness of physiotherapy.

The purpose of rehabilitation in terminally ill people is also to create conditions in which these people achieve the optimal level of social integration. Due to the variety of incurable and chronic diseases, as well as the course of the

disease, it should be remembered that the qualification for the above procedures should be individual for each patient and include people with different degrees of disability. Above all, rehabilitation aims to improve the quality of life and optimise participation in social and professional life by treating the underlying disease, preventing and treating complications, as well as improving functioning and activities, thus enabling full participation in society. Rehabilitation in palliative hospice care should be conducted by an interdisciplinary rehabilitation team consisting of: team leader - medical rehabilitation specialist, physiotherapist, occupational therapist, psychologist, speech therapist, pedagogue, nurse, clergyman, social assistant, as well as a volunteer. The effectiveness of the therapy depends on good communication and understanding between the team and the patient, as well as between the co-workers of the team. Individual skills of individual team members and their involvement in the work are extremely important. While qualifying patients for a particular type of treatment, the following should be taken into account: the time elapsed since the diagnosis was made, since surgical or conservative treatment, the method of treatment applied, as well as the coexisting symptoms of individual systems and organs [12]. One of the very important elements to consider is the age of the patient and his general fitness, because often the general fitness does not go hand in hand with the metric age. After an exhaustive examination of the patient by a physiotherapist, the question should be asked: what methods will the rehabilitated palliative patient be, will it be only kinesitherapy, physiotherapy or massage, or will new physiotherapeutic techniques be used?

Kinesitherapy is defined as a rehabilitation management method in which movement is the therapeutic agent [13]. The most effective physiotherapeutic interventions are: active exercises of moderate intensity, breathing exercises, training on a cycloergometer or on a moving treadmill. The definition of the kinesitherapy programme should take into account the patient's age, gender, progress of the basic disease, physical fitness, as well as the intensity, duration, frequency of exercise and applied physico- and kinesitherapy. Special methods of kinesiotherapy include: manual therapy, PNF, soft tissue techniques and kinesiology taping, which can also be used in palliative patients.

It is important that the rehabilitation applied should bring the expected therapeutic effect, i.e. reduction of pain, reduction of swelling, improvement of motor activity, and thus improvement of the quality of life. Broadly understood palliative care includes the use of all relevant palliative interventions, which may include therapy modifying the course of the disease, such as surgery, radiation therapy, chemotherapy, hormone therapy, etc. Theoretically, palliative care has been developed with the aim of improving the quality of life. According to the current idea, the ultimate goal of all these interventions is to rehabilitate the patient as much as possible and to achieve therapeutic effect. The rehabilitation carried out in palliative hospice care should refer to the specific needs of the individual patient and his or her family. Palliative care is holistic care, dedicated to all patients at an advanced stage of the disease for whom the causal treatment has been discontinued. Palliative care rehabilitation is an integral part of treatment and medical care offered to patients with chronic, progressive diseases. It is part of supportive treatment. It includes combating pain and physical, psychosocial and spiritual suffering. It provides relief from pain and other troublesome symptoms [14]. When used in the appropriate disease cycle together with other therapies, it aims to prolong life and control annoying clinical complications [15]. It is a non-pharmacological form of support for terminally ill patients and their families. Rehabilitation may be provided in palliative care units specialising in the treatment and management of these patients, providing them with specialist inpatient care, in inpatient hospices, inpatient palliative care support teams, day-to-day palliative care centres. It can also be used as an outpatient clinic for palliative medicine and hospice palliative care, as well as for palliative care at the patient's home, as well as in private specialist surgeries and general treatment [16]. The rehabilitation used in this care has great importance and works well in many countries to meet the expectations of both patients and their families. According to Israeli studies, well-run rehabilitation care extends the patient's life by half a year and is more than prolonging life in many cancer diseases using oncological drugs. This is possible because the patient is not exposed to adverse events associated with oncological treatment, and his body is not burdened with it [17]. According to John Christian Smuts, who formulated the paradigm of holistic medicine in 1926, it is necessary to take an interest in the entire human person in a holistic approach.

CLINICAL SYMPTOMS IN PALLIATIVE PATIENTS

The most common clinical signs in oncological patients are: pain, swelling and lymphedema, dyspnoea, diarrhoea and constipation, exhaustion and fatigue process with cancer, swallowing disorders, group of neurological disorders.

PAIN

Pain is one of the most common symptoms reported by cancer patients. Several types of pain can occur in cancer. Pain accompanies most oncological patients and can occur at any stage of the disease. It can be the first symptom of cancer, as well as a signal of progression of changes or a complication of surgical or oncological treatment in form of chemotherapy and radiotherapy. It exerts a destructive influence on the life of the patient and his relatives. We distinguish the following types of pain in cancer: [18]

a. Pain caused by the direct mechanical effects of the tumor (the growing tumor presses the adjacent organs and mechanically irritates the sensory nerves of the tumor area, as well as infiltrates adjacent structures)

b. Pain caused by cancer metastases: to the bone, especially at metastases of lung cancer, kidney cancer, steroid cancer; to the skin causing chronic ulcers and difficult to heal skin wounds; to the parenchymal organs, e.g. to the

liver causing liver enlargement, symptoms of discomfort and oppression; often to the biliary and liver tract; to the brain causing headaches and dizziness, imbalances related to the increase in intracranial pressure

c. Pain as a result of cancer, chronic gastrointestinal mucositis, hindering swallowing, decubitus ulcers, lymphatic oedema

d. Pain occurring immediately after the surgery, e.g. after surgical treatment of cancer

e. Pain in the distant postoperative field due to e.g. tissue fibrosis after multiple procedures in the same area, obstruction disorders due to postoperative adhesions in the intestine

f. Phantom pains after amputations, located in a lost organ

g. Pains resulting from anticancer treatment, i.e. chemotherapy causing damage to peripheral nerves, inflammation of mucous membranes, pain syndromes in the course of infection as a result of immunodeficiency or radiation therapy; pains occurring in the rectal area as a result of damage to mucous membranes after irradiation.

h. coincidencive pains not related to cancer, but accompany patients with cancer, because they are the result of other burdens.

A combination of pharmacotherapy with physical and kinesiotherapy plays an important role in cancer pain therapy. Pharmacological treatment is applied according to an analgesic ladder. The analgesic efficacy of physical therapy for patients with cancer is limited, so it becomes a complementary element. Musculoskeletal pain, which intensifies when performing movements, becomes an exception, because physiotherapy is a treatment of choice [19]. After a thorough diagnosis and analysis of the cause of musculoskeletal pain, we use elements of soft tissue therapy, as well as gentle mobilization techniques in the field of osteopathy and manual therapy. Good therapeutic effects in case of these patients are achieved by classical massage or deep massage [20] When recommending physiotherapy in palliative care, one should not forget about the progress of the cancer process, as well as the existing contraindications, especially for physical therapy. Pain resulting from bone metastases in women and men significantly reduces the patient's activity and also causes a significant deterioration in the patient's quality of life [21] Physiotherapy is a complementary element in this type of ailments, as oncological treatment, i.e. radio- and chemotherapy, plays an essential role. Physiotherapy in these ailments is a very important element, for which the task is not only to reduce pain, but also to achieve an anti-fracture effect. As a result of disorders of bone tissue metabolism and its microarchitecture, fractures often occur. Osteoporosis and osteopenia are often applied to the basic disease, which is a detriment after the treatment. Oncological patients in the course of osteoporosis often have low energy fractures as a result of falling from their own height. The above fractures may affect the distal part of radial bone, thoracic and lumbar vertebrae, especially the TH12- LS segment, as well as fractures of the proximal end of the femur. The consequences of these fractures are varied, the most dangerous is the fracture of the neck of the femur, where the mortality resulting from such fractures is 10-20%. This mortality rate is higher in men than in women, especially in African Americans. Approximately 20% of people who have had a fracture require constant care, and 30-50% of people never return to a condition similar to the one before fracture. Mortality due to compression fractures of the vertebrae is relatively low and amounts to 1-4%, however chronic pain, kyphosis, loss of growth, reduced self-esteem are the main consequences of vertebral fractures [22]. Fracture of Collesa type, i.e. fracture of the radial bone, does not cause increased mortality, most often algodystrophy is a complication of this type of fracture. Physicotherapy and kinesitherapy used in osteoporosis and chronic diseases plays an important role in activating bone forming cells (osteoblasts) to replace bone hungry cells (osteoclasts). Neuromodulatory methods of electrotherapy - transcutaneous electro stimulation of nerves (TENS) are used to lower the pain threshold. In electro stimulation of TENS high-frequency pulse currents are used, most often between 80-100 Hz, i.e. conventional stimulation [23]. In case of patients with a high probability of fractures, in addition to pharmacological treatment affecting bone metabolism, it is extremely important in fracture prophylaxis to choose an appropriate orthosis to protect vital organs and tissues. This choice may concern either hip joint orthosis or orthosis in form of laces for the spine, especially the TH-LS section. Such orthoses play a protective role, reducing the risk of femoral neck fracture, to which oncological patients are particularly exposed. It should not be forgotten, however, that the method of ordering the orthosis, time and place of its use is decided by the doctor in consultation with the patient and family. Excessively longwearing the orthosis may lead to muscle atrophy and decrease of muscle tension in the surrounding tissues. Given the high tendency to falls in patients weakened by the basic disease, it is necessary to inform their relatives and caregivers about the need to eliminate slippery floors, moving rugs, obstacles to movement, additional facilities to change position, installation of handrails and handles to facilitate the use of the bathroom and toilet, adaptation of means of transport and public traffic to enable the use of these people during their movement [24]. Especially for people with walking disorders, the use of walking sticks and crutches should not be forgotten, as well as the appropriate selection of such equipment. There is a group of patients completely immobilised in bed during the terminal period of the disease, who should also pay attention to the change of position, exercise in bedside respiratory gymnastics, as well as the need to educate the patient and his or her caregiver about how to care for him or her. Similarly, in the course of phantom pains, especially in the initial period after the amputation procedure, often besides pharmacological treatment, rehabilitation that enables coordination of balance, gait, breathing and effort tolerance is extremely important. Systematic physical activity relieves pain resulting from motion system dysfunctions and has a very positive impact on the psyche and reduces the feeling of pain through increased secretion of endorphins.

SUMMARY

The goal of palliative care is to achieve the best possible quality of life for patients and their families. It includes relief from pain and other somatic symptoms, reduces mental, spiritual and social problems, supports the patient's family during illness and mourning. Palliative care is a specialised medical and social service. In this care, the family is important in all phases of the disease. It is exposed to various factors along with its incurably ill member. The disease significantly interferes with its structure and functioning. The family system may be affected by the disease to such an extent that it becomes dysfunctional. The illness of a person in the family is a source of completely new, specific problems, it can also bring back the existing and so far unsolved ones, or exacerbate current problems. Rehabilitation treatment is an important non- pharmacological method of life quality improvement in oncological patients, especially in autumn of life. 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.

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