

REVIEW / PRACA POGLĄDOWA

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ACTIVATION OF THE ELDERLY WITH DEMENTIA SYNDROME

AKTYWIZACJA SENIORA Z ZESPOŁEM OTEPIENNYM

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Summary

Dementia is a set of symptoms caused by a chronic and progressive brain disease. The disease leads to the disorders of higher brain functions such as memory, orientation, thinking, understanding, counting, ability to learn, language and assessment. Dementia causes decrease in intellectual functions and hinders basic everyday life activities. The most known disease connected with dementia is the Alzheimer's disease. Its treatment consists of pharmacotherapy and other

nonpharmacological methods, which play an important part in the improvement of patient's functioning. Activation of the elderly person with dementia is not easy and depends greatly on our attitude. The purpose of this article is to present different therapeutic methods activating the patient in a daytime. Apart from physiotherapy, the methods include occupational therapy and memory training.

Streszczenie

Otępienie jest zespołem objawów spowodowanych chorobą mózgu o charakterze przewlekłym i postępującym. W schorzeniu zaburzone zostają wyższe funkcje korowe takie jak pamięć, orientacja, myślenie, rozumienie, liczenie, zdolność uczenia się, język i ocena. Otępienie powoduje spadek funkcji intelektualnych oraz utrudnia wykonywanie podstawowych czynności dnia codziennego. Najbardziej znanym schorzeniem otępiennym jest choroba Alzheimera.

Leczenie polega na zastosowaniu farmakoterapii oraz metod niefarmakologicznych, które odgrywają ważną rolę w poprawie funkcjonowania. Aktywizacja starszej osoby z otępieniem nie jest łatwa i zależy od naszego podejścia. Celem pracy jest przedstawienie różnych metod terapeutycznych aktywizujących chorego w ciągu dnia. Zaliczamy do nich oprócz fizjoterapii m.in. terapię zajęciową czy trening pamięci.

Key words: dementia, nonpharmacological methods, activation, elderly people

Słowa kluczowe: otępienie, metody niefarmakologiczne, aktywizacja, osoby starsze

INTRODUCTION

Dementia is one of the important diseases, which constrain the functioning of the elderly. It is a challenge for the medical staff, family and social help institutions. In geriatrics, dementia syndrome is

considered one of the grand problems because of the difficulties in treatment, functioning and care. Dementia, according to international classification of psychiatric disorders and behavior, is a set of symptoms caused by a chronic and progressive brain disease. The disease leads to disorders of higher brain

functions such as memory, orientation, thinking, understanding, counting, ability to learn, language and assessment. Furthermore, other symptoms such as problems with processing information, emotional and behavioral disorders occur [1].

Depending on the basis of changes dementia is divided into primary degenerative dementia, vascular, mixed or occurring with other diseases and injuries of the CNS [2, 3]. Primary degenerative disorders include: Alzheimer's disease, Lewy bodies and frontotemporal dementia. Vascular dementia occurs as a result of ischemic or posthemorrhagic changes in the course of different vascular diseases of brain, e.g. disorders of the large and small blood vessels and during intracerebral hemorrhage [3]. Mixed type is diagnosed when there are symptoms of both primary degenerative dementia and vascular dementia. The fourth group concerns dementia occurring in the course of other diseases such as Parkinson's disease.

EPIDEMIOLOGY AND DIAGNOSTICS

In the developed countries occurrence of the dementia disorders at the age of 65 is 1.5%. This value doubles every four years and reaches 30% at the age of 80 [4]. Polish studies are diversified because of the scope and methodology. The carried out analyses prove that women suffer from dementia more frequently than men [4]. In Gdansk region dementia occurrence frequency is 6.7 % and it concerns mainly women. The study was carried out in the group of 283 people. According to the authors, the result is close to the European research results [5]. Assessment of the citizens of Warsaw (Mokotów district) proves that prevalence of dementia increases with age and reaches the highest values among people at the age of 80 to 84 [4].

Dementia diagnostics consists if an interview with a patient and their carer, evaluation of the degree of the impairment of functioning in everyday life activities, psychiatric examination, neuropsychological evaluation and neuroimaging tests (CT, NMR). Imaging evaluation is used when other diseases have been excluded [6]. Psychological examination assesses the degree of the impairment of cognitive functions. The following tests are used: Mini-Mental State Examination (MMSE), clock drawing test, Montreal Cognitive Assessment (MoCa), Eddenbrooke's Cognitive Examination 3.

THE COURSE OF DEMENTIA

Caring for the patients with dementia is not easy. Carer is usually faced with many difficulties. It is caused by memory disorders, which exacerbate as the disease progresses. The elderly people suffering from dementia forget the activity done previously, as well as the date of birth or their own family members. They feel lost and may have problems coming back home. The symptoms may occur in various ways. Patients gradually start having problems with the activities of daily living (washing, getting dressed, eating, sphincters control, moving) and instrumental activities of daily living (doing shopping, cleaning, using money or telephone). Mood swings and behavior changes may occur. Frequently depressed mood or impulsive emotional reactions are observed. In the further stage of the disease hallucinations (patients see people or things that do not exist), delusions and aggression may occur. The next problem are the neurological symptoms, which concern spontaneous movements, movement difficulties and changes in muscle tension [3]. In dementia speech and sleeping disorders may occur. Speech, language and general communication problems lead to difficulties in expressing patients' own needs. Sleeping disorders are caused by changes in the rhythm of day. During the day there is sleepiness and at night - agitation.

WAYS OF ACTIVATING

Ways of activating the elderly are diverse which results from the complexity of problems occurring in dementia. Appropriate methods and types of exercises are selected depending on the stage of the disease. Therapeutic attitude towards the patients is crucial and it demands a lot of patience without pushing the patient. In the activating exercises, functional training of daily activities must be taken into account. It is important not to help too much to let the patients stay independent for as long as possible. Depending on the stage of dementia, appropriate activities are selected e.g. helping in meals preparation (making a sandwich, peeling and chopping vegetables, arranging fruit), activities in the toilet and getting dressed (if there is a problem, the patient should be instructed or get help), doing simple housework (dusting, floor sweeping, arranging things), working in the garden (raking, picking fruit) [7] and doing shopping together. During these activities, it is worth to talk and ask about the

names of things, fruit, vegetables, present date, and age and family matters.

Movement is very important in the process of activating. The aim of exercises is to sustain independent functioning, improvement of physical fitness (muscle strength, gait) and relieving emotional tension and anxiety. Movement rehabilitation should be chosen according to present abilities of the patient. Difficulty in performing particular exercises should be graded; starting with easier ones and considering other comorbidities. In the early stage of dementia the range of exercises used include active, building up the muscle strength, relaxing, breath, balance, and gait exercises. They are done in the positions safe for the patient (lying down, sitting, standing) using different auxiliary devices (resistance exercises chair, bands, balls, walking sticks, balance exercises trainers) [3]. Movement in the open air is also important (walking, Nordic Walking). Exercises may also be done in water. In the medium stage, memory disorders exacerbate and orientation in time and space deteriorates. The patient may be agitated, have problems communicating and controlling fecal and urinary continence. In this period functional, manual, breath and position changing exercises are used. In the late stage, patients have serious problems with independence and are dependent on others. They need help while doing any activities of daily living and care. There are significant problems connected with movement or the patient stops walking. Active assisted exercises are used as well as passive ones, which prevent movement limitation in joints. Verticalization is recommended e.g. sitting on bed from the lying position and taking a standing position (if it is feasible) with the assistance of the other person or on the verticalization table [3]. The studies carried out prove that movement activity of people with dementia causes mood, behavior and physical fitness improvement [8]. Using the appropriate exercising program helps in preventing falls [9].

Beneficial in activating patients with dementia is **occupational therapy**. It may be done individually or in small groups. Occupational therapy consists of many techniques, which have positive influence on patients. It includes art therapy, sociotherapy and ergotherapy. Most frequently used is art therapy, which uses drawing, painting, music therapy, choreotherapy, or bibliotherapy. Art therapy needs individual attitude, constant presence of therapist is necessary and the subject of work must be determined. It is necessary to use paints that are safe for the patients. Constant

supervision is needed as some disoriented seniors paint with too much tension and rest is advisable. During the break patient relaxes the hands and straightens up. According to Stern, special room and enclosed space, called atelier, is needed to paint as it facilitates the artistic activity of the disoriented patients. In the atelier, there is no daylight not to let the patient be suggested by anything from the outside [10]. Concentration and mood improve thanks to the activities connected with art [11]. Patients feel the pleasure of creating.

Music therapy has a positive influence on the state of being of patients [12]. Two types of music therapy may be distinguished: passive and active. The first one consists of listening to music that is selected in an appropriate way. Calm and quiet pieces have relaxing influence and make the patients feel safe. It is necessary to find the type of music therapy that will be beneficial for the senior. The forms used are usually simple. Selected music should take the patients back to their childhood or youth. It is recommended to join passive and active music therapy as it may encourage the patient to take part in the present events [13]. Active music therapy includes singing, clapping to the music rhythm or playing instruments (drums, tympani, bells, ratchets, guitar [9], piano). Diversity of instruments may attract the attention and encourage the patients to use them. For some people singing by the fire of listening to a church choir may be an interesting experience. Music therapy session lasts from 60 up to 90 minutes. When planning the classes possible distractions must be taken into account. These may include hallucinations, anxiety or sudden verbosity in people with language and communication disorders. Music may unblock them after the months of silence. In disoriented patients, it is necessary to organize the classes in an orderly way to help the patients feel safe [14]. Active music therapy causes the improvement of emotional state and hence, gives the biggest benefits [15].

Choreotherapy is one of the art therapy and psychotherapy methods. It is also called dance therapy and uses the movement of the whole body. During the classes, different music is used. Dancing to the sounds of music influences the nonverbal communication as well as creativity and encourages improvisation. Dance therapy has no contraindications. Choreotherapy relaxes tensions, relieves anxiety, improves mood and physical fitness (balance, movement coordination, body posture). For the people suffering from dementia

circle dance is recommended. This is a group therapy where participants hold their hands, elbows or shoulders. Dancing in the circle gives positive effects in the somatic, psychological or social aspect. In the somatic aspect, it improves general ability, mobility, and circulation and relaxes the organism. Psychologically, it improves the cognitive processes and calms negative emotions (hostility, irritation, anxiety). Thanks to the circle therapy patients may link up with other participants and try to communicate, both verbally and nonverbally [16].

Bibliotherapy is also used in the therapy of patients with dementia. Seniors read their favorite books or magazines. It is worth inviting the patients to discuss what they have just read. If there are difficulties reading, somebody else may read book fragments aloud.

Hortitherapy known in Poland as garden therapy uses plants as a therapeutic factor. It is well known and commonly used in the USA, Canada, Japan [17] and Great Britain. In Poland, it slowly appears in nursing homes or occupational therapy workshops [18], even though it is not recognized as a form of therapy. Hortitherapy should be selected according to patient's needs and abilities. Classes consist of introducing the participant to gardening (caring, planting), influencing the senses (touch and smell), relaxing and resting or observing the plants. In the patients with dementia, hortitherapy causes decrease in the aggressive behavior, mood improvement, concentration and attention increase [17].

MEMORY TRAINING

Dementia may have different intensity. When planning memory training the state of patient and disease development must be taken into consideration. The aim of exercises is aiding and strengthening undamaged parts of brain and slowing the loss of cognitive processes. Patient cannot be forced to memory training and participation in classes must be voluntary. It is best to encourage the senior by passive participation. While observing they may want to take part in the exercises. Preparing the classes, present state of the patients and their past interests should be considered. Exercises are to be constructed according to the rule of errorless learning, where failures or mistakes are excluded up front from the learning process. Hence, the possibility of making a mistake must be minimized. The participant feels satisfied and

their self-esteem rises. Exercises are selected individually considering their feasibility e.g. remembering the names of family members and friends, using calendar and board to write down information. Matching verbal information with visualization has a positive effect. Good method is also joining memory exercises with psychomotor training. Physical activity helps to oxygenate the brain better. In the memory training multisensory stimulation may be used. It consists of activating all of the senses. During the classes seniors look, smell, taste and touch [19].

SUMMARY

Sustaining independence of patients with dementia is possible thanks to physical and mental functionality exercises. Activating should be done in the daytime during the daily activities. It is not easy and needs special attitude especially if the family or carers do it at home. Proper education will help to take better care of the patient. It is important to understand that seniors suffering from dementia do not understand their behavior and patients with language and communication disorders have problems initiating conversation and expressing their needs. Hence, it is important to talk to them as much as possible. It is important to create safe surroundings as people suffering from dementia may pose a threat for themselves and others.

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