The specifics of dental treatment in geriatric patients

(Specyfika leczenia stomatologicznego pacjenta geriatrycznego)


Abstract – Dental treatment of elderly patients presents a big challenge. The planning of the diagnosis and methodology of treatment along with the rehabilitation of the masticatory system requires the dentist's to possess knowledge which extends beyond the field of dentistry. The specificity of dental treatment in geriatric patients is related to the fact that many general diseases, disabilities as well as mental and psychological limitations can coexist together. In this article, we have attempted to describe several issues related to this difficult topic, which is omitted from the literature.

Key words - geriatrics, masticatory organ rehabilitation, multi-pharma therapy, xerostomia, senile dementia, depression.

Streszczenie – Leczenie stomatologiczne pacjenta w podeszłym wieku to duże wyzwanie. Zaplanowanie diagnostyki oraz metodyki leczenia i rehabilitacji narządu żucia wymaga od lekarza dentysty wiedzy wykraczającej poza dziedziny stomatologiczne. Specyfika leczenia stomatologicznego pacjenta geriatrycznego związana jest bowiem z faktem współistnienia u niego wielu chorób ogólnych, inwalidztwa, ograniczeń mentalnych i psychicznych. W artykule podjęliśmy próbę opisania kilku zagadnień związanych z tym trudnym i pomijanym w literaturze tematem.

Słowa kluczowe – geriatria, rehabilitacja narządu żucia, multifarmakoterapia, kserostomia, demencja starcza, depresja.

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I. INTRODUCTION

The phenomenon of societal aging occurring at an unprecedented scale and intensity has clearly affected the majority of highly developed countries throughout the world, including Poland [1,2,3]. The number of young people in reproductive age and who are able to work will decrease, while the number of people requiring support and care will increase. Demographic forecasts for Poland [2-4] in the perspective of 2060 are unfavourable. We belong to a small group of countries of the European community, in which, for the last 25 years, three negative phenomena have been taking place (and successively increasing) from the point of view of demographic dynamics: fertility decline, intensification of emigration and lack of immigration [2-4]. The consequence of this may be a demographic decline, which will be a key factor negatively affecting the economic and social development of our country. Increasingly, in dental practice, there is a need to carry out professional, multidisciplinary care of a geriatric patient, which may prove to be a big challenge. Who is the geriatric patient? After long discussions at the European meetings forum, the Geriatric Section of the European Medical Specialists created a definition of the so-called geriatric pa-
tient. According to this definition, a geriatric patient is a person with typical multiple chronic pathologies over the age of 60 (most often over 70) or every person aged 80 and more due to the increased age risk of complex pathologies as a result of, among others, significant risk of complications and individual disease syndromes and the so-called "domino effect", a high risk of chronicisation of acute diseases and a significant risk of losing autonomy as a result of the loss of functional capacity [8].

II. GEROSTOMATOLOGICAL TREATMENT

The specificity of gerostatic care is associated with many factors that can fundamentally affect the dental treatment plan, methodology of diagnosis and procedures. The limitations we may encounter may arise from co-existing systemic diseases of a chronic nature. Studies have reported that about 86% of patients over 65 years of age have a comorbid general disease, impairment of sensory organs i.e. auditory, eyesight and taste, struggle with cognitive (dementia) and psychiatric disorders and physical disability of a significant degree [9].

III. SOMATIC DISEASES

Studies have reported that at least 83% of people after the age of 65 appear to have one or more somatic diseases [8,9]. The most common are: hypertension, osteoarthritis, osteoporosis, cataracts, glaucoma, neoplasms, breathing disorders, neurological diseases. Multipharma therapy used in connection with the coexistence of the above-mentioned diseases is of enormous importance for oral health as it intensifies the physiology of saliva production by the salivary glands due to age [10]. Table I provides a list of some drugs that cause or increase dry mouth. It is said that saliva is for the mouth what blood is for the whole body. Its properties of purifying, nutritional, defensive, buffering acidic, remineralising hard tissues of the teeth are modified and the consequence of this condition may include pathologies within the oral mucosa (healing wounds and abrasions due to injuries), periodontium, severe caries, fetor ex ore, intolerance to prosthetic restorations, bacterial, viral and fungal infections [10,11]. While struggling with the pathologies of other systems and organs, older people, more often than in other age groups, downplay the diseases and dysfunctions of the oral cavity. They often lack the patience, time and finances required to undergo dental treatment. Often the comfort of a properly functioning masticatory apparatus is perceived as unattainable in old age and it is easy for older patients to become reconciled to living with discomfort [12,13]. A dentist's cooperation with a tired and ailing patient is difficult. They lack motivation and patience, especially since the treatment and rehabilitation of the masticatory system is long and multidisciplinary.

IV. CHANGES IN THE PSYCHE RELATED TO AGE

It should be remembered that older people undergo natural mental changes related to age [13-15]. Psychologists most often mention: reduction of interest, rigidity and stiffness of views, fear of everything new, weakening of association, change of emotional sensitivity, emotional volatility, sense of infallibility (so-called wisdom), miserliness, collecting useless things, disregarding new times and the younger generations, irritability, tendency to close up, concentration on their ailments, sense of mismatch and irritation towards the surrounding world [14]. Aggravating psychological factors are not without significance, i.e.: negative life balance, social isolation, loss of social status, fears of material deprivation which often determine the attitudes of old patients in the office and during treatment [15,16]. As physicians applying geriatric procedures, therapeutic and diagnostic procedures should take into account the coexistence of non-medical problems that naturally affect our patients and result from the aging process, i.e. loneliness, loss of relatives, a rapid change in the model of life and the need to rebuild goals and choose appropriate measures for these purposes in people due to retire [17].

V. DISEASES AND MENTAL DISORDERS

The psychological health of these patients is a neglected and extremely important factor influencing the quality of mutually-built relationships between the dentist and the old patient. It turns out that among people over 65 years of age, mental disorders affect 12-22% of the population [14]. The most common include: dementia, depression, neurotic disorders, addiction [18,19]. Dementia in these people may be manifested in the form of repeated incidents of memory impairment impeding everyday functioning, difficulties in performing daily housework, language disorders, disorientation about time and location, problems in assessing the situation, abstract thinking disorders, losing things, mood
changes, personality changes, lack of initiative [16,17]. Depression is a phenomenon that often coexists with other neurological diseases [17]. In the case of patients with Parkinson's disease, it is diagnosed in 20-60% of cases, among patients after stroke in 20-65% of cases, in patients with epilepsy in 11-22% and in patients with multiple sclerosis in 20-50% [17-20]. It turns out that the risk of suicide in depression in the elderly is twice as high as in depression in people of working age [17]. What's more, specialists warn that if late-onset depression is suspected, the patient must be treated by a psychiatrist [17].

VI. NUTRITION

A very important factor conditioning the health not only of the oral cavity and the effectiveness of each therapy is nutrition of the body. Nutritional deficiencies appear in both obese and malnourished people and crucially affect the worsening of treatment effects. With age, there is a decrease in energy demand [21]. If we take the value for the age of 30 as 100% of the energy demand, then the value will decrease to 97% at the age of 40, at the age of 50 to 94%, 60 to 87% and after 70 years to 79% of the total demand [21,22]. In the elderly, nutritional deficiencies result from reduced supply, poor eating habits, diets associated with environmental habits and systemic diseases [23]. With age, protein metabolism slows down by 30%, gastrointestinal disorders are more frequent due to coexistence of chronic diseases, dehydration associated with reduced supply, poor eating habits, diets associated with environmental habits and systemic diseases [23].

VI. SUMMARY

The systemic diseases mentioned above and general factors may turn out to be significantly worsening the effects of dental treatment. In addition, practice shows that they are often overlooked or downplayed during a general interview, and may be crucial in achieving the purpose of treatment or rehabilitation of the patient's masticatory system.

VII. REFERENCES