

Comment

The number of people over 65 years of age (the age most often indicated as the beginning of old age) is increasing worldwide, but currently this is most visible in Europe. Aging particularly affects the countries of the former Eastern bloc, especially Poland; it is estimated that the proportion of elderly people in our country will increase up to 26.7% in 2035, which is an increase of about 7% in relation to 2015 (19.4%) (the Central Statistical Office).

Aging is a progressive process that affects all tissues. Its rate and course depend on genetic (gene variants), environmental and stochastic factors. Up to the ninth decade of life, the course of aging and the length of life depend mostly on environmental factors, while longevity and extreme longevity appear to depend primarily on genetic factors. Age-related decrease of ability to maintain homeostasis increases the risk of developing type 2 diabetes, neurodegenerative disease, cancers and cardiovascular diseases, among others.

The increase in the number of older people and pathophysiological consequences of aging entail both social and economic effects: the number of professionally active persons is rapidly decreasing while the number of people receiving disability benefits/pensions is increasing, the number of people requiring assistance in daily life or full time care is also increasing, costs of medical care are rising and organizational problems related to the increased demand for medical services might worsen. For these reasons, it is essential to take preventive measures aimed at extending the healthy phase of life and the period of independence of the elderly. In addition to the healthy lifestyle, primarily involving a healthy diet, physical and intellectual activity and avoiding stimulants and other adverse environmental factors, pharmacological therapies are an important element of anti-aging actions. Among them, great expectations are associated with hormonal therapies. A synthetic description of changes in the endocrine system in the course of uncomplicated aging is presented in the article entitled "Aging and the endocrine system". The authors also give updated information on the potential use of various hormones in the framework of balancing shortages caused by aging, devoting particular attention to sex hormones, as there are numerous controversies associated with their use.

Unfortunately, in some cases, avoiding aging-associated diseases is not possible. In such case, appropriate communication with the patient is crucial for diagnosis and therapy. Establishing effective contact, acquisition and maintaining patients' trust become more difficult when the patients become older. Key elements of communication with an older person, often burdened with multiple physical (i.e. deafness) or cognitive (dementia) disabilities, are described in the article entitled "Communication with elderly patients – a key to success in geriatric care".

One of the universal problems of old age is pain, often chronic. The author of the paper entitled "Pain treatment in the elderly" indicates diseases of the joints and bones (limbs and the sacro-lumbar area), postherpetic neuralgia and diabetic neuropathy as the most common causes of pain in the geriatric population. Treatment of pain in the elderly requires a number of modifications, as compared to the treatment being administered to younger people, and the principles for such therapy are described in the article.

Cardiovascular diseases are the most common among the diseases associated with aging. Atrial fibrillation is the most common arrhythmia in the elderly, and its complications are, for example, stroke and congestive heart failure. The authors of the article entitled "The strategies of treatment of atrial fibrillation in the elderly" describe the principles for the assessment of the risk of these complications, and give guidelines on how to successfully deal with atrial fibrillation in the elderly. Another disorder of the cardiovascular system, the rate of which significantly increases with age, is heart failure resulting from various pathogenic factors, including hypertension, coronary heart disease, diabetes, lung and kidney diseases. The authors of the article entitled "Heart failure in the elderly" describe the principles of diagnosis, and pharmacological and non-pharmacological treatment of this disease in the elderly.

Another major problems of old age are cognitive disorders, which most commonly result from neurodegenerative diseases, mostly from Alzheimer's disease. A synthetic description of pathogenesis, symptoms and (rather ineffective so far) therapies in Alzheimer's disease are described in the article entitled "Neurodegenerative diseases: Alzheimer's and Parkinson's disease". The authors of this paper also describe the problems associated with Parkinson's disease, the symptoms of which are perhaps not as drastic as in the case of Alzheimer's disease, but may prevent the normal functioning of the patient and also make him/her totally dependent on the help of others. In turn, the author of "Non-cognitive symptoms of dementia" draws attention to behavior disorders, as well as to psychotic and affective symptoms often associated with dementia, the occurrence of which may precede the onset of cognitive impairment. Careful observation of an elderly person and paying attention to his/her "atypical" behavior may therefore contribute to the rapid diagnosis of dementia and early implementation of non-pharmacological and pharmacological measures aimed at slowing down this process.

Finally, aging is not free from diseases of other organs and systems. Problems associated with renal and respiratory diseases, their diagnosis and treatment, are dealt with in the articles entitled “Chronic kidney disease in the elderly” and “Misdiagnosis of respiratory symptoms in elderly patients – clinical cases”.

The articles present in this issue of “Progress in Medicine” discuss only selected problems related to morbidity, diagnosis and treatment of the elderly. Despite this, we hope that readers will turn their attention to the distinctness of the diagnostics and treatment of older patients and facilitate their work with the constantly increasing number of such patients in doctors’ offices.

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