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Letter to the Editor

Prophylactics of Type 2 Diabetes and Diabetic Foot

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Dear Editor-in-Chief

Diabetes mellitus is one of the major health problems worldwide. Overall 285 million people suffer from this pathology, 90% of whom have type 2 diabetes mellitus. The number of diabetics is expected to double by 2030 (1). Diabetes is a chronic and progressive disease responsible for major vascular complications. It is a socially significant disease that worsens the quality of life and leads to permanent disability and mortality. Therefore, the prevention of type 2 diabetes is a priority public health goal (2).

Measures for primary prevention of type 2 diabetes refer to investing in programs for primary prevention of type 2 diabetes by training the population to protect against the disease, as well as for early detection of people at increased risk for its occurrence. Lifestyle changes, achieving a healthy weight and moderate physical activity can help to avoid or delay the development of type 2 diabetes and, accordingly, its complications – the development of diabetic foot (3).

Regular physical activity is one of the key elements on which the primary prevention of type 2 diabetes is built. Moderate physical activity helps maintain weight, lowers blood pressure, lowers the heart rate at rest, increases insulin sensitivity of muscles, facilitates the burning of body fat (4). Reducing abdominal fat improves insulin resistance and facilitates the control of metabolic abnormalities. A balanced and varied diet is important for health. Such a diet also reduces the risk of cardiovascular disease (5).

Smoking has been identified as a risk factor for many chronic diseases, including type 2 diabetes and related complications. Regular smoking increases the accumulation of abdominal fat and insulin resistance (6). A relation exists between stress and depression and the increased incidence of diabetes. Everyday conflict and stressful situations can cause diabetes and cardiovascular disease. People with depression tend to neglect their health care. Chronic sleep deprivation under six hours and long sleep over nine hours are associated with an increased risk of developing type 2 diabetes. Insufficient sleep can lead to abnormalities in the hormones that regulate appetite and energy expenditure. The disturbed balance between the two leads to weight gain (7). People at high risk of developing type 2 diabetes can reduce this risk by 31% by using the antidiabetic drug Metformin in parallel with lifestyle and dietary changes (8).

Increased life expectancy in patients has brought to the fore chronic complications, among which a significant place is occupied by the diabetic foot. Diabetic foot is a special form of angiopa-

thy. It is a complex of pathological changes of the lower limbs and feet due to the developing vascular-degenerative syndrome and changes in the peripheral nervous system, which are characteristic of patients with diabetes. As a result of polyneuropathy, the so-called neuropathic diabetic foot develops, characterized by painless callous ulcers in the area of the heels and pads of the toes. Due to its importance, the problem should be considered as a separate symptom complex - a special clinical issue, and not just as complications of a different nature in diabetics (9).

Prophylactics of diabetic foot is essential to avoid its complications. Strict observance of daily foot hygiene, disinfection with a colloidal solution of silver 20 mg/l, drying of the spaces between the toes, in the presence of dry skin, use of a suitable cream is necessary (10).

Conflict of interest

The authors declare that there is no conflict of interest.

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