



MODERN PROBLEMS IN EDUCATION AND THEIR SCIENTIFIC  
SOLUTIONS

IDENTIFICATION OF CLINICAL AND NEUROLOGICAL  
SYMPTOMS IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

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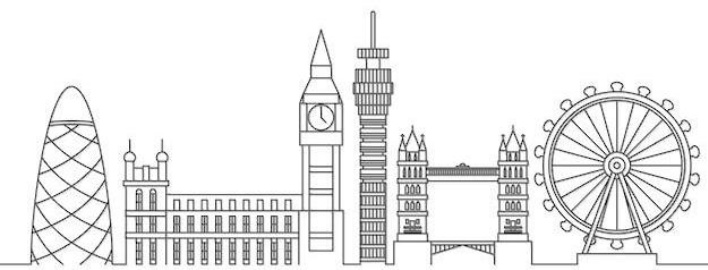
**Relevance.** Diabetic angiopolyneuropathy (DANP) is one of the most common and disabling complications of diabetes mellitus, significantly impairing patients' quality of life and increasing the risk of trophic disorders, ulcers, and limb amputations. Early detection of microvascular and neuronal changes can slow disease progression and improve the effectiveness of therapy. However, in clinical practice, DANP is often diagnosed at a late stage due to its asymptomatic course and the lack of timely instrumental assessment.

**The aim of the study was** to evaluate clinical and neurological symptoms in patients with diabetes mellitus.

**Materials and methods.** The study included 140 patients (70 with diabetic angiopolyneuropathy and 70 with diabetes but not yet developing angiopolyneuropathy). Patients in the risk group received preventive therapy: glycemic control, antioxidant support, and improvement of endothelial function.

**Results.** The analysis revealed that in the group of patients with diabetic angiopolyneuropathy, pronounced sensory impairment was detected in 82.8% of those observed, while among patients at risk, subclinical signs of neuropathy were identified in 44.3% of those examined. Microcirculation assessment using laser Doppler flowmetry revealed a 47% decrease in perfusion in the study group and an 18% decrease among individuals without clinical angiopolyneuropathy, while capillaroscopy recorded a decrease in the density of functioning capillaries by 36% and 14%, respectively. These results confirm that early vascular and neuronal changes occur long before the clinical manifestation of DANP. Clearly, a key component of prevention is the active detection of subclinical forms through neurophysiological tests and microcirculation assessment methods.

**Conclusion.** The data obtained convincingly demonstrate that diabetic angiopolyneuropathy develops against the background of combined vascular and neuronal disorders, which can begin even before the manifestation of clinical symptoms. Early, subclinical changes were also identified in the risk group, indicating the onset of the pathological process and confirming the need for active screening even in the absence of neuropathy symptoms.





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