



therapy, cardiac repair, reduce a kidney glomerular lesion and perivascular inflammation infiltration, and able to treat diabetes. Recent studies have shown the extensive usage of hDPSCs in the neurodegenerative diseases such as spinal cord injury (SCI) and peripheral nerve injury, acute cerebral ischemia, and autoimmune disorders.

Thus, these data are of significant importance, since dental pulp stem cells from third molars are the most suitable material for use in tissue engineering because they do not violate moral and ethical norms and human rights, unlike the embryonic stem cells. Cell collection is a non-invasive procedure. It is more cost-effective and can be widely used in various fields of medicine and dentistry in particular.

Hlushenko T.A.

ANALYSIS OF THE PECULIARITIES OF THE ORAL FLUID IN PERIODONTAL DISEASES WITH UNDERLINE METABOLIC SYNDROME

*Department of Therapeutic Dentistry
Bukovinian State Medical University*

Over the past few years, scientists have devoted attention to the problem of studying the relationship between metabolic syndrome and periodontal disease. Topics of risks related to the association with various metabolic disorders have become one of the most important research topics in periodontology. Oral fluid plays a leading role in the proper functioning and maintenance of homeostasis of the entire periodontal tissue complex, is a mediator of the combination of its structures with the environment and an important nutrient substrate for the microflora of the oral cavity.

The objective of the research is to study the quantitative and qualitative changes in oral fluid in periodontal disease with underline metabolic syndrome, the rate of secretion of mixed saliva, its viscosity, and acid-base balance.

Two groups were formed for the research: basic and comparative. The main group included 30 people with inflammatory-dystrophic lesions of the periodontium with underline metabolic syndrome, the comparison group consisted of 30 people with the periodontal disease without endocrinological pathology.

According to the obtained data, the average value of the rate of salivation in patients with metabolic syndrome (0.41 ± 0.04 ml / min) was lower than the normal values for this indicator (0.5 ml / min) and 1.5 times lower than the same value in patients without endocrinological pathology (0.60 ± 0.07 ml / min, $p < 0.01$). Thus, hyposalivation in all age groups and a decrease in salivary secretion with age were observed in patients with metabolic syndrome, which was confirmed by objective complaints of patients referred to dryness and lack of free saliva in the oral cavity. The mean value of oral viscosity in patients with metabolic syndrome (1.72 ± 0.27 MPaS) exceeded the upper margin of reference values (1.2-1.4 MPaS) and was greater than that of patients without somatic pathology 1.2 times (1.39 ± 0.18 MPaS, $p < 0,01$). In the main group, a shift of the number of hydrogen ions to the acidic side was observed in all the age categories. The comparison group also showed a decrease in pH with aging, but the tendency was smaller.

The results of the study revealed homeostatic shifts in the oral biosystem of patients with periodontal disease with underline metabolic syndrome: a decrease in salivation may indicate a violation of the secretory function of the salivary glands with underline metabolic disorders, which naturally affected the increase in saliva viscosity. The predominance of acidosis in the oral cavity and the reduction of the protective properties of saliva becomes an important factor in creating a periodontopathogenic situation in the oral cavity and the complication of the course of periodontal disease in this category of patients.