



Indicators of bioelectric activity of the muscles of the maxillofacial region with the presence of combined pathology of dentoalveolar anomaly

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ABSTRACT

Annotation. Many studies speak about the dependence of myofunctional disorders and the formation of occlusion pathology. Our study shows changes in the bioelectric activity of muscles during orthodontic treatment, and also shows the effect of orthodontic treatment on the change in electromyography.

Introduction. Recent studies allow us to rationally explain the complex pathogenetic mechanisms of dental anomalies and deformities, which have a multifactorial nature. It was found that myofunctional disorders are the most significant among postnatal factors affecting the formation of occlusion. It should also be noted that many researchers.

The aim of our study is the effect of orthodontic treatment on the bioelectric activity of muscles in the presence of combined pathology of dentoalveolar anomaly in children aged 9-12 years.

Experimental methods. Electromyographic study was performed using four-channel computer neuromyopathies analyzer "Synapsis" in dental equipment connected to the computer with the given software for the analysis of the obtained results.

Research result. Previously, three groups of children were recruited. The first group included 53 patients treated with the use of the device of functional action, the second-50 patients in whom the hardware treatment was supplemented by the use of a myofunctional simulator, the third – 34 patients using only the simulator.

Summary. Thus, according to the results of the evaluation of the values of the average amplitude of EMG potentials achieved after correction, it was found that the greatest decrease was observed in patients receiving combined treatment-using both the apparatus and the simulator.

Thus, the greatest decrease in EMG potentials was expressed in the correction of VHF by a combination of hardware treatment and a simulator. The use of the simulator was accompanied by a moderate negative dynamics of EMG potentials, and with the isolated use of hardware correction, changes in indicators were practically absent.

BIOGRAPHY

Ignateva Lilya is a graduate student of the last year of study in KSMU. She also runs a private practice as an orthodontist. Her research interests are focused on myofunctional disorders of the maxillofacial region in children. In addition to the scope of his scientific interests, the doctor constantly attends conferences and seminars in his profession and is also the speaker of these events.

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