MORPHOLOGICAL FEATURES OF DENTOFACIAL AREA IN PEOPLE WITH DENTAL ARCH ISSUES COMBINED WITH OCCLUSION ANOMALIES

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The level of development of each era determines the specifics of recognizing diseases and teaching about them. Nowadays, there is an increased interest taken by patients in their own appearance as well as in the structural features of the facial part of their heads [1, 2]. Another issue currently faced by the dentistry is the growing prevalence of dentofacial anomalies and deformities among various population groups [3, 4]. The etiological factors behind anomalies and deformities include dental system congenital and acquired pathologies, and especially dental arch defects [5, 6, 7]. The effect of the dental arches pathology on the craniofacial status has been proven in numerous works written by clinical experts [8, 9]. It has been noted that the timely treatment and preventive measures offered to patients with dental arches defects through different age periods, has a beneficial effect on the growth, development and condition not only of the masticatory system, yet also on the adjacent organs and body systems [10, 11, 12]. Given the above, studying maxillofacial morphology in people with dental arch defects will remain an urgent issue for dentistry.

Aim of study

To identify anatomical and physiological dentofacial features in people with dental arch defects combined with occlusion anomalies.

MATERIAL AND METHODS

The maxillofacial area status was assessed in 312 people in their first mature period (21–35 years of age). Out of the total number of patients, a representative sampling was done involving 127 patients who needed pre-prosthetic orthodontic treatment. Subjective and objective research methods were employed following the protocol for the managing patients with partial absence of teeth.

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RESULTS AND DISCUSSION

127 people out of 312 patients had a combined pathology, which accounted for $40.7 \pm 0.16\%$. Out of the patients with dental arches defects in combination with occlusion pathology, 50 patients were found to have individual teeth position anomalies, which was 39.4 ± 0.38 % of the number of patients with combined pathology. Dental arches anomalies and deformities were observed in 35 people (27.56 ± 0.35%), while another 42 patients had pathological occlusion, which in relative terms was $33.1 \pm 0.37\%$ of the number of patients with the dental system combined pathology. Anatomical and physiological maxillofacial features, as a rule, had a pathology localization in the dental arch. Anomalies and deformities of the dental arches anterior part entailed aesthetic and functional impairments. There were frequent speech disorders and disturbed food bite. An incorrect position of the front teeth was the etiological factor behind periodontal disease accompanied by impaired blood circulation, while it contributed to the development of traumatic occlusion. There was pathological teeth mobility observed as well as disturbed teeth position in different directions. Patients with anomalies and deformities in the chewing segment, experienced discomfort in the mouth while chewing food. There was frequent overload of antimers, which suffered from additional stress in case of unilateral defects. In case of bilateral defects of the dental arches, patients often complained of the functional status of the temporomandibular joints. Patients with abnormal eruption terms, abnormalities in the number of teeth (hypodentia), and abnormal position of the teeth,

were found to have varying degrees of teeth deviation from their normal position.

CONCLUSION

The results of the study indicate a high level of occlusion anomalies prevalence in people with dentofacial arches defects. Anatomical and physiological dentofacial features were typically attributed to the dental arch pathology localization.

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