HYGIENIC STATUS OF THE ORAL CAVITY AND PERIODONTAL TISSUES BEFORE ORTHODONTIC TREATMENT IN CHILDREN WITH MALOCCLUSION AND TEMPOROMANDIBULAR JOINT DYSFUNCTION

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Abstract: As a rule, signs of TMJ pathology begin to be traced in patients from the age of 14. In children and adolescents of earlier age with dentoalveolar anomalies, cases of initial signs of deviation of the joint function are rare, with the exception of systemic diseases [Bulycheva E. A., 2007; Ivasenko P. I., 2009; Silin A.V., 2007; Semenyuk V. M., 2003; Khvatova V. A., 2004].

Ivasenko P. I. et al. (2007) found that in patients with connective tissue dysplasia and internal disorders of the temporomandibular joint, catabolic processes in the tissues predominate, chronic inflammation with a pronounced productive component is diagnosed, manifested by edema of the connective tissue, perivascular infiltrates, homogenization of collagen fibers, hyalinosis, severe sclerosis, which causes a more severe course of the disease due to vascular obliteration, deterioration of the trophic capsular-ligamentous apparatus. The result is a more dynamic development of the pathological process, the occurrence of complications such as osteoarthritis, synoviitis, and the rapid appearance of irreversible deformities in the temporomandibular joint. Evaluation of the hygienic state of the oral cavity and periodontal tissues in children with malocclusion and temporomandibular joint dysfunction based on studies.

In order to study and identify children at risk of developing diseases of the temporomandibular joint in 2018-2020, we conducted outpatient treatment in the Bukhara Regional Dental Clinic and the dental training and research center of the Bukhara State Medical Institute. Of the 202 children treated with various abnormalities, 45 children were included in our main group.

The results of the initial study of the hygienic state of the oral cavity and the state of periodontal tissues in children with malocclusion and temporomandibular joint dysfunction are presented in the table .

Table.

Hygienic status of the oral cavity and periodontal tissues before orthodontic treatment in children with malocclusion and temporomandibular joint dysfunction

The control group indicator	**RMA%**	**Schiller-Pisarev Test**	**Bleeding**	**Dental stones**	**CPITN**
The main group (n=60)	29,11± 1,79	1,66± 0,05	0,44± 0,07	0,26± 0,04	0,73± 0,04

Control group(n=20)	14,01± 2,04	1,08± 0,16	0,155± 0.04	0,17± 0,02	0,31± 0,1

The data presented in this table show that the initial hygienic status of children assigned for orthodontic treatment in children with malocclusion and temporomandibular joint dysfunction was "unsatisfactory", and no statistically significant differences in quantitative and qualitative indicators were found. In children with dental anomalies and temporomandibular joint dysfunction, the value of the PMA index (papilla-margin-alveolar process) in periodontal tissue and inflammatory changes in the Schiller-Pisarev test differ more clearly and reliably with the corresponding data of an almost healthy group. Symptoms of bleeding in the main group of children were observed in 29 people in 65% of cases. Dental calculi were detected in 73.3% of the study group and in 46.6% of the control group. In the control group, gum tartar was detected in 8 children, which was 53.3%. Children in the main group also had to undergo professional oral hygiene, which, according to the CPITN index, included learning hygiene skills, motivation, and control of "professional" brushing. According to the CPITN index, the need for these measures in the main group was 82.2%, in the control group - 60%. The dynamics of changes in hygienic indicators reflecting the state of periodontal tissues was determined as an evaluation criterion for orthodontic treatment.

Conclusion

Professional oral hygiene was carried out in all groups of children: motivation using the program "Clear Dentistry", training in individual oral hygiene, professional cleaning of teeth with the help of instrumental removal of tartar, selection of hygiene products and methods. The presented data substantiate the need for preventive measures before the start of active treatment with the use of orthodontic devices and during treatment.

References:

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