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## **APPLICATION OF ORTHODONTIC DEVICES IN CHILDREN WITH HIGH JAWPROTRUSION WITH REGARD TO THE PRIKUS CONDITION**

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**Relevance of the study.** In children with upper jawprotrusion, the palate of the orthodontic device consists of a bracket, a metal button with an arc hole, which is fixed to the tooth in a distal position from the side of the palate. A partial arc is placed between the bracket and the button, on which an arc is placed from the opening nitinol (Nabiev N. V. (2017) there is a known way to distalize and rotate the first molar teeth of the upper jaw using the apparatus put into practice by the author. The pendulum device consists of: orthodontic coatings (rings), arc and palate acrylic button. Orthodontic coatings are made by simple or thin-walled (thickness 0.15-0.18 mm) stamping in accordance with the generally accepted technology of coating production. Orthodontic rings can be made from stamped orthodontic coatings (cutting the chewing surface), chrome-nickel tape 0.15-0.2 mm thick and 3.5 to 6 mm wide, and standard blanks. Orthodontic rings are fixed to the first molar teeth of the upper jaw. The orthodontic arch is the strengthening element of the structure. The palate acrylic button is its support.

Another orthodontic device recommended by authors treating upper jawprotrusions there are also orthodontic devices that are modified to move the upper jaw teeth. Atakov M. A. a removable plate, fastened on its shield, included hooks for pulling. The korkhouse device is designed to treat high jawprotrusions. Its technical characteristics depend on the type of protrusion. The main element of the device, which is characteristic of all types, is metal hoops or rings for incisors. For a vertical rod cross section with a canister, the metal rings open distally, attach to the mesial surface and through a lateral thread or rubber. The effective properties of the orthodontic device, in which the contractile force of ligatures extending between the Canes leads to the approach of the teeth, are shown by the author in his research. In our scientific study, we aimed to treat patients with high jawprotrusion by means of an Infant trainer, trainer K1, trainer K2, Elainers, which have different characteristics from the methods practiced on the side of the above-mentioned authors.

34 patients aged 4 to 6 years were treated for high jawprotrusions in children during the period of I guruh milk teeth prikus through Infant trainer, trainer Tk2

orthodontic devices, as well as barrier orthodontic devices for removable plate-based tongue for patients in control group were used. During the II Group exchange period, 83 patients aged 7 to 13 years used a modified form of plastic base screw device twin block device for Elainers and control group patients in the treatment of high jaw protrusions in children. During the period of pricus of permanent teeth III, 65 patients aged 14 to 18 years were prescribed an orthodontic device brake, trainer V and an orthodontic device brake, which is not taken in the treatment of high jaw protrusions in children.

In the treatment of upper jaw protrusions in children of 34 patients aged 4 to 6 years, during the period of pricus I, the trainer for Infant was specially developed for children aged 4-6 years, with the aim of eliminating harmful habits such as thumb sucking, infantile type swallowing and improper chewing. This can lead to a violation of the development of the facial – jaw joint and the misalignment of the milk teeth, which in turn leads to deformation of the alveolar Arch in milk and constant biting. The earlier harmful habits are eliminated, the more deformities of the child's facial jaw serve as a leading program for early detection and Prevention of development.

**Conclusion.** The following advantages were found when the trainer for Infant orthodontic device was used in patients of I group who were being examined. It is very easy to use and allows you to lose such harmful habits from childhood. It also stimulates the tone of the circular muscles of the mouth. This orthodontic device helps complete chewing movements to stimulate myogymnastics and jaw growth. The trainer for Infant active chewing process stimulates the natural development of the jaw and facial muscles, thereby ensuring the normal physiological state of the chewing apparatus.

#### LITERATURE USED

- 1. Badridinov B. B., Fozilov O'.A** Modern indicators of upper jaw protrusion in children under the influence of various external factors // European journal of modern medicine and practice Vol. 2 No. 9 (Sep - 2022) EJMMMP ISSN: 2795-921X. - P. 82-86
- 2. Fozilov U.A., Olimov S.Sh., Badriddinov B.B.** Characteristic change in the protrusion of the upper jaw in children // Journal of new century innovations. Vol. 30 No. 4 (2023): Volume30 Issue-4. – P. 175-179
- 3. Fozilov Uktam Abdurazakovich., Badriddinov Baxrom Baxtiyorovich.** Preventive measures aimed at preventing complications in the orthodontic treatment of patients // International Journal of Health Systems and Medical Science. ISSN: 2833-7433 Volume 2, No 6, June – 2023. -P.53-57
- 4. Fozilov Uktam Abdurazakovich., Badriddinov Baxrom Baxtiyorovich.** To study indicators of orthodontic status and determine its modern features in children // European journal of modern medicine and practice. Vol. 3 No. 06 (Jun - 2023) EJMMMP ISSN: 2795-921X. P.38-43
- 5. Badriddinov B. B., Fozilov U. A.** The Effectiveness of a Comprehensive Program for the Prevention of Dental Deformities in Children // Research journal of trauma and disability studies. Volume: 01 Issue: 12 | Dec – 2022 ISSN: 2720-6866. P.141-146.