

TREATMENT OF DEEP BITE WHEN PLANNING TREATMENT BASED ON THE MAIN DIRECTION OF JAW GROWTH

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The relevance of research. Deep bite is an anomaly of occlusion in the vertical plane, usually combined with malocclusion in the sagittal and transversal planes. According to the literature, the incidence of patients with this pathology for orthodontic care ranges from 18% to 43.4%. (Malygin Yu.M. 1976,1985, Persii L.S. 1998, Khoroshilkina F.Ya. 2001, Minaeva I.N. 2005, Kavraiskaya A.Yu., Medvedovskaya N.M. 2006, etc.). A different approach The determination of the prevalence of deep bite is reflected in the data on its frequency.

Methods of treating deep bite in children have been developed more fully than in adolescents and adults (Malygin Yu.M.: 1976, 2004, Petrova Yu.K. 1986, Maychub I.Yu. 1994, Hanukai A.R. 1996, Lendengolts J.A. 2001, Al-Eregat 2003, McNamara J.A., Brudon W.L. 1993, and others). Diagnosis and treatment of this malocclusion is a rather difficult problem in orthodontics. The identified diagnostic errors in the analysis of treatment results are due to the variety of forms of deep bite (Ilin-Markosyan L.V. 1974, Khoroshilkina F.Ya. 1970 - 2006, Malygin Yu.M. 1971 - 2006; Shcherbakov A.S. 1980; Petrova Yu.K. 1986; Zubkova L.P. 1997; Mailyan P. D. 1998; Morozova N.V. 2000; Basmanova E.V. 2001; Persii L.S. 2004; Graber T.M.1994; Alexander R. 1997; Proffit W.R., 1999; Sabri R. 2001; Lisson J.A. Trankmann^ J.T. 2002; Mergen J.L. et al. 2004 and others).

Currently, the issues of diagnosing maxillary-facial anomalies with deep bite and predicting the results of their treatment remain relevant. Clinical, radiographic, anthropometric, and functional research methods are mainly used. A comprehensive analysis of the results obtained makes it possible to evaluate data on the condition of the dental system.

Purpose of the work: to study the features: structures of the facial skull: with deep neutral and deep distal bites to improve the diagnosis of anomalies and treatment planning, taking into account the main direction of jaw growth.

The incidence of deep bite is 25.3% among schoolchildren in Krasnogorsk and 37.1% among patients seeking orthodontic care. It was found that with a neutral deep bite, there is an irregular tilt of the longitudinal axes of the incisors, dental alveolar elongation in the area of the anterior teeth and dental alveolar shortening in the lateral

areas of both jaws; which partially extends to their basal part and affects the aesthetics of the face, especially its lower part; with a deep distal bite, in addition to these disorders, underdevelopment is noted body and branches of the mandible, retroposition of the temporomandibular joints and mandible, anteposition of the base of the upper jaw. Of the 20 parameters recommended by foreign and domestic authors for determining the main direction of jaw growth, the main most informative ones (angles: NS MP, H7MeGo and S-Go ratio:N-Me-100) with a high degree of statistical assurance ($p < 0.001$) were found.

For each parameter, boundaries are defined that characterize the neutral, horizontal and vertical directions of jaw growth. The frequency of occurrence of each direction of jaw growth in different types of bite was determined: with orthognathic bite, the neutral direction of growth prevails (-78.4%) over horizontal (13.3%) and vertical (8.3%); with deep neutral bite, the neutral direction of jaw growth slightly prevails (50.8%) over horizontal (46.3%) and vertical (2j9%); with deep distal bite, the horizontal direction of jaw growth (51.7%) prevails over the neutral (36.2%) and vertical (12.1%).. Deep bite therapy during the period of active jaw growth should be chosen taking into account their main growth direction. In the treatment of adult patients, the direction of jaw growth no longer plays such an important role. In the treatment of deep neutral and deep distal occlusion using functionally functioning devices, positive.

Conclusion In adults, despite favorable dental alveolar compensation, the shape of the face profile and the relative position of the jaw bases changed slightly. Correction of the depth of the incisor overlap occurred: with neutral and horizontal directions of jaw growth due to a decrease in the dental alveolar height in the area of the incisors and its increase in the area of the lateral teeth; with the vertical type of growth, mainly due to dental alveolar shortening in the area of the incisors and to a lesser extent due to its elongation in the area of the lateral teeth. An analysis of the immediate and long-term treatment outcomes of 104 patients (for up to 2 years) showed that the main direction of jaw growth changed slightly in older age. Incisor overlap deepened in 6 patients whose functional disorders (oral breathing, infantile swallowing, bad habits) were not completely eliminated, as well as due to the early loss of individual teeth.

Literature:

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