

*Materials of Conferences***LINEAR PARAMETERS OF ASYMMETRIC UPPER DENT-ALVEOLAR ARCHES CONDITIONAL BY UNILATERAL EXTRACTION OF THE FIRST PREMOLAR**

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For asymmetry of teeth arc that is defined by single-side removal of the first premolar non-symmetric placement of anti-measures is character, that is reflected in the main linear parameters of the complete and incomplete side of arc.

The objective of the research is to define linear parameters of asymmetric dent-alveolar arcs, defined by the lack of anti-measure for one of premolars on the upper jaw under normadentism of constant teeth and mesognatic shape of dent-alveolar arcs.

We have carried out a biometric study of 17 jaw models, obtained from patients of both sexes of the first maturity period after orthodontic treatment with single-side removal of the first premolar of the upper jaw. Measures of the both arc sides we taken, one of them was named complete, and another – incomplete (with lack of one of premolars) without signs of laterality.

To define main parameters of the main frontal point, located in contact place of medial cutting teeth of the upper jaw near the cutting edge, we have placed a perpendicular to the line that links distal surfaces of the second molars. This line was called as «sagittal arc line». From the centre of the distal surface of each tooth we have placed a perpendicular to the sagittal arc line, it allowed us to measure transversal (W) and sagittal (D) parameters of arcs. Frontal-distal diagonal of dent-alveolar arc (FD) was measured from the frontal point to the point, located at the centre of distal surface of a certain tooth.

The results have shown that in the front arc department the size of frontal-distal diagonal didn't have any signs of laterality and, in general, equaled $22,7 \pm 1,94$ mm. At the same time, arc depth up to the fang level at the complete side was shorter by about $4,2 \pm 1,21$ mm, and arc width was bigger by $2,8 \pm 0,93$ mm.

The most evident alterations took place in the area of chewing teeth. Frontal-distal diagonal at the complete arc side was bigger by $4,6 \pm 0,82$ mm, up to the level of constant molars – by $4,3 \pm 0,95$ mm, and up to the second molars – by $3,1 \pm 0,79$ mm, it was conditioned by mesial shift of chewing teeth to the defect.

The width of dent-alveolar arc at the complete side up to second premolars equaled $22,3 \pm 2,4$ mm, to first constant molars – $24,8 \pm 2,6$ mm, to second molars – $28,75 \pm 2,5$ mm the width of dent-alveolar arc of the incomplete side to second premolars

equaled $18,35 \pm 1,9$ mm, to first constant premolars – $19,6 \pm 2,3$ mm, to second molars – $21,8 \pm 2,4$ mm. Besides, the depth of dent-alveolar arc at the complete side was smaller than it was at the incomplete side, that was conditioned by an asymmetric shape of dent-alveolar arc.

Thus, we have outlined reliable differences of the main parameters of dent-alveolar arcs on both complete and incomplete sides.

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THE POSTEXTRACTIONAL SPACES ALVEOLAR CREST AUGMENTATION BEFORE THE ORTHODONTIC TREATMENT

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At present, the osteoplastic materials application field is quite the different and diverse one – from the bone defects filling just after the teeth extraction before the implantation, up to the osteo – replacing operations, for the purpose of the bone tissue regeneration accelerating. However, we have not yet met the necessary information on the alveolar process augmentation at the stage of the orthodontic treatment with the following permanent teeth removal in the modern literature.

In this connection, we have offered to be formed the postextractional spaces, simultaneously, with the tooth extraction by the orthodontic indications. So, to do this, we have performed the alveolus gentle curettage after the tooth removal, then we have filled the alveolus with the dense biomaterial (e.g. the osteomatrix, the biomatrix, the bioimplant, the kolap – kp, the blood plasma), we have put in the stitches and have inserted the sutures upon the mucous membrane and the periosteum. We have distributed the biomaterial by the vestibular, the lingual or the palatal bone surface for the further alveolar arch widening, the bone contour correction, besides the dense biomaterial filling, then we closed and repaired the wound, and, after that, we have mobilized the mucous membrane. Moreover, we have created the orthodontic load a month (e.g. 30 days and nights) just after the augmentation conducting.

Thus, the patients had been divided into the 2 groups: the patients, for whom the postextractional spaces have been formed just after the tooth extraction by the different and the various methods,