

*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 kolapol – 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,

entered into the *first* (e.g. or the *basic*) group. So, the patients of the *second* group refused from the offered surgical correction methods, and then, the orthodontic treatment by the generally accepted methods has been conducted for them.

So, the bone tissue loss has been evaluated, as in the vertical, well as in the vestibular – lingual directions.

So, the obtained research results had been shown, that the postextractional spaces alveolar crest defect size in the *first* group was made up  $0,19 \pm 0,11$  mm in the vertical direction; it was made up  $0,9 \pm 0,12$  mm in the vestibular one, and it was made up  $0,78 \pm 0,11$  mm in the lingual one. At the time, as all these indices had been made up in the *comparison* group:  $2,95 \pm 0,5$ ;  $1,9 \pm 0,23$  and  $2,05 \pm 0,26$  mm, correspondingly. Thus, the defect size at the patients of the *basis* group was quite less, than in the *comparison* group.

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#### GASTROENTEROLOGICAL PATHOLOGY OF CHILDREN WITH GOITER

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In clinical practice plenty enough of information is accumulated that deficit of thyroidin hormones be what degree negatively influences on child's organism, is the factor of high risk of violation of growth and development for children, forming of chronic pathology and growth of socially meaningful illnesses. Consequently high-frequency of endemic goiter among child's population and decline of function of thyroid gland subject to the condition iodine deficit show by itself a serious threat to the somatic (specifically gastrointestinal tracts) and psychical health. As Kuban behaves to territories with the deficit of iodine, remonitoring of deficiency iodine diseases for children that development of modern approaches to their prophylaxis is both social and medical the issue of the day. To examine prevalence and structure of gastroenterological pathology of children with goiter. The program of inspection foresaw the statistical analysis of school age children's case report with pathology of gastrointestinal tract, with the selection of clinically instrumental and laboratory researches. Determination of concentration of iodine in urine of children from the different climate-geographical areas of Kuban showed that in most children excretion of iodine with urine is reduced. General frequency of goiter for the children of Kuban from data of palpation research is 53,3% of degree prevails for girls, for certain high-frequency of goiter and predominance of his heavy degrees it is registered for

the children of mountain area of dwelling. 34,6% children of basic group (with the different degrees of goiter) were characterized the changes of indexes of thyroid type of, which go out outside age-old parameters, 18,8% have signs of subclinical hypothyroidism. Children from the mountain area of dwelling had the most wide vibrations of maintenance of hormones of the hypophysial-thyroid system. In the structure of gastroenterological pathology among children with the goiter of 1-2 degrees first place has chronic gastroduodenitis – 86,6%. Characteristic of this pathology is a decline of amount of hypertrophic gastroduodenitis with the displays of lymphofollicular hyperplasia, increase of erosive destructive affection of gullet, stomach and duodenum. Classical basic therapy does not give a positive clinical result and prolonged effect. Pays attention on itself increase of frequency of gastric and duodenum ulcers. In 88,7% of sick children with pathology that is associated with *Helicobacterium* that it is confirmed with express method and cytological research. Among concomitant pathology of this contingent of children the pathological changes of liver (67,7%) of different level of affection prevailed often in combination with affection of the bile-excreting system, kidneys and intestine. More than half of children had allergic affection: allergic dermatitis and food allergy. At the same time ultrasonic research of sign of dyspancreatism was registered in 90% of children with gastroenteritis pathology. We consider such state as reactive involvement of pancreas to the pathological process in connection with the uneven arcade of bile in duodenum because 87% of children were found with various deformations of gallbladder. Thus, there is considerable growth of gastroenterological pathology among school age children that live in the zone of endemic goiter.

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#### PSYCHOSOMATIC DISORDERS OF CHILDREN WITH DUODENAL ULCER

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The main factor of pathogenesis of disease at emotional stress is an accumulation in fabrics of free radicals, those results in lipid peroxidation of membranes of different cages, especially neurons of cerebrum. Thus in central nervous system especially in the structures of limbic-reticular complex, there are changes of sensitiveness of neurons to neuromediator and oligopeptidis. It, in the turn, leads to forming of stagnant emotional excitation in central nervous system, which results in proof violation of mechanisms of self-regulation of arte-