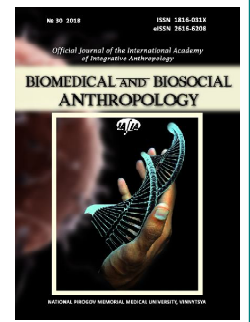




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Computed-tomographic vestibular-tongue sizes of teeth in boys and girls with normal occlusion depending on face types

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Research of computed-tomographic size of teeth in representatives with different types of faces and physiological occlusion allows dentists to make the correct approach to orthodontic treatment of patients in the clinic of orthodontics, orthopedic dentistry and maxillofacial surgery. The purpose of the work is to establish the limits of the percentile scope and the peculiarities of the computed-tomographic vestibular-tongue sizes of teeth in young boys and girls with physiological bite, depending on the type of face. Primary computer-tomographic dimensions of the width of the crowns of teeth, the width of the teeth at the anatomical neck, the distance from the anatomical neck to the apex of the root and the distance from the middle of the cutting edge to the apex of the root of the teeth in the vestibular-tongue direction, as well as the cephalometric parameters of 44 boys and 50 girls with normal occlusion close to the orthognathic bite received from the data bank of the research center of the National Pirogov Memorial Medical University, Vinnytsya. Face type was determined using the Garson morphological index. The statistical processing of the obtained results was carried out using the statistical software package "Statistica 6.0" using non-parametric estimation methods. In boys and girls with physiological bite with different types of face the boundaries of the percentile width of the crowns width, the width of the teeth at the level of the anatomical neck, the distance from the anatomical neck to the apex of the root and the distance from the middle of the cutting edge to the apex of the root in the vestibular-tongue direction are determined. The analysis of gender differences in the size of the teeth showed that all the indicators of the distance from the anatomical neck to the apex of the root and the distance from the middle of the cutting edge to the apex of the root of the corresponding teeth in the vestibular-tongue direction in young boys with a broad face are significantly higher than that of girls with a wide face; the vast majority of the size of the width of the crowns of teeth and the width of the teeth at the level of the anatomical neck in the vestibular-tongue direction in the young boys with a broad face are also significantly higher than that of girls with a wide face. Reliable or tendentious differences in computed-tomographic sizes of the teeth in the vestibular-tongue direction between girls with a very wide and wide face are not established. The results broaden the understanding of the anatomical structure of permanent teeth in young boys and girls of Podillia with a physiological bite with different types of faces, which will allow dentists to improve the efficiency of treatment of defects in teeth and dentitions.

Keywords: *boys, girls, face type, computed-tomography, vestibular-tongue sizes of teeth, physiological bite, sexual differences.*

Introduction

Aesthetic factors in orthopedic treatment are multifaceted, but above all they include the concept of harmony of form and function. Harmony of form mean proportionality, proportionality of individual elements of the face and tooth-jaw system. Treatment directed, as on the reproduction of the perfect image of the human face, its tooth-jaw system, and on the restoration of the

individual aesthetic-functional optimum [11, 12, 14, 21].

Individualized orthodontic and orthopedic treatment cannot be performed without taking into account the laws in the structure of the craniofacial complex, since the basis of the bite make up individual morphological and functional factors [3, 6, 15, 16]. The facial part of the skull should be regarded as a

constructive unity, taking into account ethnic, constitutional and individual characteristics of the skull. A number of authors consider the type of person to be a reliable reference point for determining the shape and value of the dental arch, aesthetic criteria for the production of artificial teeth [9, 10, 17, 19].

The results of a number of studies confirm the existence of positive correlations between the face and the teeth. These patterns should be taken into account when trying to change the size of the teeth during orthodontic treatment, as indications for the removal of individual teeth with abnormalities of the maxillofacial area, as well as when selecting the parameters of dentures, which requires the achievement of an optimal functional balance with the cranial-facial structures [3, 6, 12, 18].

Thus, the study of variations in the parameters of teeth in persons with different types of faces in the physiological and optimal functional occlusion allows an orthodontic clinic, orthopedic dentistry and maxillofacial surgery to carry out a systematic approach to orthodontic treatment and reduces the probability of going beyond the compensatory capacity of each patient's body.

The purpose of the work is to establish the boundaries of the percentile scope and the peculiarities of the computed-tomographic vestibular-tongue of the size of teeth in young boys and girls with physiological bite, depending on the type of face.

Materials and methods

Primary computed-tomographic indexes of the size of the teeth and cephalometric parameters of 44 boys and 50 girls of the Podillia region of Ukraine with normal occlusion close to the orthognathic bite (determined by 11 points according to M.G. Bushan et al. [2]) obtained from the bank data of research center of National Pirogov Memorial Medical University, Vinnytsya.

The research was conducted according to the scheme developed by Gunas I.V., Dmitriev N.A. and Marchenko A.V. [5] with the help of a dental cone-ray tomograph - Veraviewepocs3D, Moret (Japan) within these characteristics. The volume of the three-dimensional image is an 8x8cm cylinder, a layer thickness of 0,2/0,125 mm, an irradiation dose of 11-48 ?Sv, a voltage and a current of 60-90kV/2-10mA. Measuring the width of the crowns of teeth (TSHIR), the width of the teeth at the anatomical cervix (VDEG), the distance from the anatomical neck to the apex of the root (VLROOT), and the distance from the middle of the cutting edge to the apex of the root (L) in the vestibular-tongue direction was carried out in the program shell i-Dixel One Volume Viewer [Ver.1.5.0] J Morita Mfg. Cor. Since in the conducted studies, when comparing the copyrighted-tomographic metric characteristics of the same names of the right and left sides, there were no significant differences or trends [5], we in the subsequent studies use the mean values of the corresponding teeth on the upper (designation 1) and lower (designation 4) jaws. Thus in our study: 11 or 41 - upper or lower central incisors, 12 or 42 - upper or

lower lateral incisors, 13 or 43 - upper or lower canine tooth, 14 or 44 - upper or lower first premolar, 15 or 45 - upper or lower second premolar, 16 or 46 - upper or lower first molar.

Measurements of cephalometric sizes were carried out with a soft centimeter ribbon and a large compass with a scale in the natural size of the Martin system [1]. The face type was determined using the morphological index of Garson - the ratio of the morphological face length (direct distance from nasion to gnation) to the face width in the region of the cheek arches [13]. Up to a value of 78.9 young boys and girls were assigned to a group with a very broad face; 79.0-83.9 - wide face; 84.0-87.9 - middle face; 88.0-92.9 - narrow face; 93.0 and more - very narrow face. The following distribution is established: boys with very wide faces - 6, boys with wide faces - 25, boys with middle faces - 6, boys with a narrow face - 6, boys with very narrow faces - 1; girls with a very wide face - 21, girls with a wide face - 20, girls with a middle face - 6, girls with a narrow face - 6, boys with a very narrow face - 0. Therefore, for further studies of boys and girls with different facial types we investigated only boys and girls with wide faces and girls with a very wide face.

The statistical processing of the obtained results was carried out using the statistical software package "Statistica 6.0" using non-parametric estimation methods.

Results

In boys and girls with normal occlusion close to orthognathic with different types of face on the upper and lower jaws, the borders of the percentile size (25.0 percentl and 75.0 percentl respectively) of the teeth crowns width, the width of the teeth at the anatomical neck, the distance from the anatomical neck to apex of the root and distance from the middle of the cutting edge to the apex of the root in the vestibular-tongue direction (Table 1-4).

Table 1. Percentile width of the crowns of the upper and lower jaw in the vestibular-tongue direction (TSHIR_) in boys and girls with different types of faces (mm).

Indexes	Boys		Girls			
	wide face		very wide face		wide face	
	25.0th percentl	75.0th percentl	25.0th percentl	75.0th percentl	25.0th percentl	75.0th percentl
TSHIR_11	7.4	7.8	6.8	7.5	6.8	7.5
TSHIR_12	6.3	7.0	6.0	6.6	5.9	6.5
TSHIR_13	8.3	8.8	7.6	8.3	7.6	8.2
TSHIR_14	9.1	10.0	8.7	9.5	8.7	9.2
TSHIR_15	8.9	10.0	8.6	9.4	8.5	9.7
TSHIR_16	11.0	12.0	10.5	11.3	10.4	11.3
TSHIR_41	5.6	6.2	5.3	6.2	5.4	5.8
TSHIR_42	6.1	6.7	5.9	6.5	6.0	6.5
TSHIR_43	7.7	8.5	7.2	7.7	6.8	7.6
TSHIR_44	7.8	8.4	7.0	7.9	7.3	7.6
TSHIR_45	8.3	8.9	7.7	8.4	7.5	8.5
TSHIR_46	11.1	11.6	10.7	11.4	10.6	11.3

Table 2. Percentile width of the teeth of the upper and lower jaw at the level of the anatomical cervix in the vestibular-tongue direction (VDEG_) in boys and girls with different types of faces (mm).

Indexes	Boys		Girls			
	wide face		very wide face		wide face	
	25.0th percentl	75.0th percentl	25.0th percentl	75.0th percentl	25.0th percentl	75.0th percentl
VDEG_11	6.3	6.9	5.9	6.5	5.9	6.5
VDEG_12	5.9	6.2	5.4	5.9	5.4	5.9
VDEG_13	7.8	8.4	7.0	7.6	6.9	7.6
VDEG_41	5.1	5.5	5.0	5.5	5.0	5.5
VDEG_42	5.7	6.2	5.6	6.0	5.6	6.0
VDEG_43	7.4	8.0	6.7	7.3	6.5	7.5

Table 3. Percentile swing distance from the anatomical cervix to the apex of the root of the upper and lower jaw teeth in the vestibular-tongue direction (VLROOT_) in young boys and girls with different face types (mm).

Indexes	Boys		Girls			
	wide face		very wide face		wide face	
	25.0th percentl	75.0th percentl	25.0th percentl	75.0th percentl	25.0th percentl	75.0th percentl
VLROOT_11	15.4	16.4	13.5	14.8	14.1	16.1
VLROOT_12	15.3	16.8	13.7	15.4	13.8	15.5
VLROOT_13	18.6	20.0	16.5	18.4	15.5	18.7
VLROOT_41	13.8	15.6	12.9	13.9	12.5	14.1
VLROOT_42	15.4	16.3	14.1	15.4	13.7	15.5
VLROOT_43	17.9	19.5	15.9	17.6	16.0	17.4

Table 4. Percentile swing distance from the middle of the cutting edge to the apex of the root of the upper and lower jaw teeth in the vestibular-tongue direction (L_) in boys and girls with different face types (mm).

Indexes	Boys		Girls			
	wide face		very wide face		wide face	
	25.0th percentl	75.0th percentl	25.0th percentl	75.0th percentl	25.0th percentl	75.0th percentl
L_11	24.3	26.4	22.1	23.2	22.4	24.3
L_12	22.8	24.6	21.3	22.7	21.0	22.8
L_13	26.6	29.4	24.3	26.3	23.5	26.5
L_14	21.1	23.1	19.5	21.1	19.3	21.8
L_15	20.9	22.6	18.9	21.0	18.6	21.4
L_41	20.8	22.5	19.7	21.0	19.3	21.1
L_42	22.3	23.7	20.8	22.4	20.6	22.5
L_43	26.2	27.9	23.2	24.8	23.3	24.8
L_44	22.0	23.9	20.9	21.8	20.6	22.1
L_45	22.0	23.9	20.9	22.4	19.7	22.4

Sex differences of morphometric computed-tomographic size of the teeth in the vestibular-tongue direction between the young boys and girls with a broad face, as well as the discrepancy of these indicators between girls with a broad and very wide face are given in Table 5.

Table 5. Morphometric computed-tomographic dimensions of the width of teeth crowns (TSHIR_), teeth widths at the anatomical neck (VDEG_), the distance from the anatomical neck to the apex of the root (VLROOT_) and the distance from the middle of the cutting edge to the apex of the root (L_) in the vestibular-tongue direction for boys and girls with different types of faces (mm, $M \pm \sigma$).

Indexes	Boys with a wide face	Girls with a wide face	p	Girls with a very wide face	p _i
TSHIR_11	7.610±0.318	7.159±0.496	<0.01	7.229±0.518	>0.05
TSHIR_12	6.650±0.448	6.143±0.475	<0.01	6.255±0.474	>0.05
TSHIR_13	8.459±0.421	7.913±0.549	<0.001	7.952±0.546	>0.05
TSHIR_14	9.450±0.870	9.072±0.609	<0.05	8.960±0.944	>0.05
TSHIR_15	9.445±0.685	9.188±0.777	>0.05	8.930±0.930	>0.05
TSHIR_16	11.44±0.65	10.95±0.71	<0.05	11.02±0.78	>0.05
TSHIR_41	5.957±0.356	5.621±0.419	<0.01	5.759±0.483	>0.05
TSHIR_42	6.391±0.412	6.187±0.438	>0.05	6.213±0.487	>0.05
TSHIR_43	8.035±0.470	7.270±0.580	<0.001	7.524±0.512	>0.05
TSHIR_44	7.984±0.597	7.489±0.598	<0.01	7.590±0.570	>0.05
TSHIR_45	8.552±0.688	8.051±0.760	<0.05	8.065±0.788	>0.05
TSHIR_46	11.33±0.39	11.06±0.63	>0.05	11.04±0.57	>0.05
VDEG_11	6.541±0.382	6.248±0.457	<0.05	6.163±0.391	>0.05
VDEG_12	6.068±0.292	5.554±0.363	<0.001	5.606±0.373	>0.05
VDEG_13	8.084±0.475	7.265±0.586	<0.001	7.166±0.493	>0.05
VDEG_41	5.354±0.320	5.178±0.374	>0.05	5.166±0.455	>0.05
VDEG_42	5.961±0.366	5.821±0.409	>0.05	5.736±0.390	>0.05
VDEG_43	7.665±0.468	6.981±0.588	<0.001	7.031±0.550	>0.05
VLROOT_11	15.91±1.16	14.87±1.34	<0.05	14.15±1.12	>0.05
VLROOT_12	16.18±1.14	14.86±1.37	<0.01	14.48±1.35	>0.05
VLROOT_13	19.38±1.76	17.22±2.23	<0.01	17.58±1.37	>0.05
VLROOT_41	14.86±1.47	13.39±1.12	<0.001	13.35±1.02	>0.05
VLROOT_42	15.96±1.34	14.75±1.23	<0.01	14.63±1.23	>0.05
VLROOT_43	18.70±1.26	16.83±1.42	<0.001	16.41±1.52	>0.05
L_11	25.08±1.61	23.19±1.55	<0.001	22.46±0.93	>0.05
L_12	23.95±1.52	22.01±1.67	<0.001	21.85±1.17	>0.05
L_13	28.03±1.93	25.04±2.23	<0.001	25.33±1.39	>0.05
L_14	22.00±1.71	20.86±2.06	<0.05	20.39±1.34	>0.05
L_15	21.60±1.24	20.04±2.59	<0.01	19.99±1.32	>0.05
L_41	21.91±1.40	20.04±1.38	<0.001	20.29±1.09	>0.05
L_42	23.19±1.28	21.77±1.39	<0.01	21.58±1.09	>0.05
L_43	27.20±1.51	24.10±1.39	<0.001	23.76±1.48	>0.05
L_44	23.09±1.51	21.68±1.58	<0.01	21.49±1.02	>0.05
L_45	22.96±1.67	21.21±2.32	<0.01	21.44±1.32	>0.05

Notes: p - the validity of the difference between the values of the respective indicators between young boys and girls with a broad face; p_i - the validity of the difference between the values of the respective indicators between girls with a broad and very wide face.

Discussion

One of the characteristic signs of sexual dimorphism in teeth is the differences in their size. It should be noted that sexual dimorphism of the tooth-jaw system is a very complex issue, which is determined by a number of direct and indirect

factors, whose relationship is not always constant. For example, the size of teeth in men is more closely related to body size, jaw, prognathism and other non-tooth-related factors than women. Women have a closer connection within the dental system. There is evidence that in some dental groups there are differences in terms of eruption and their size in the various articles [10, 20].

Signs of sexual dimorphism are more clearly viewed in the study of relative parameters of teeth. The crown module, representing a semi-sum of mesio-distal and vestibular-tongue diameters, is an indicator of the total mass of the crown. Its importance on women is on average less than that of men [22]. The limits of the percentile dimension of the vestibular-tongue of teeth sizes in boys and girls of the Podillia region of Ukraine with normal occlusion close to orthognathic bite can be used to correctly calculate dental and interdental indices.

L. O. Zuykina [23] when studying the vestibular-tongue diameters of the crowns of the teeth of the upper and lower jaws, it was found that the studied index in men is significantly higher than that of women in all groups of teeth. The greatest prevalence of this trait is found in the canines.

The analysis of sexual differences between the computer tomography and the vestibular-tongue size of the teeth (see Table 3) showed that all the indicators of the distance from the anatomical neck to the apex of the root and the distance from the middle of the cutting edge to the apex of the root of the corresponding teeth in the vestibular-tongue direction in the boys with a broad face are significantly higher ($p < 0.05-0.001$) than girls with a broad face; the vast majority of the size of the crowns of the teeth (with the exception of the upper second premolar, the lower lateral incisors and the lower first molar) and the width of the teeth at the anatomical cervix (with the exception of the lower central and lateral incisors) in the vestibular-tongue direction in young boys with a wide face is also significantly higher ($p < 0.05-0.001$) than in girls with a wide face.

In the studies of A. A. Glushak [4], among teenagers of Podillia with orthognathic occlusion with the corresponding facial types, the following differences in the vestibular-tongue dimensions of the teeth were found: in most cases, boys with a wide and very wide face, both on the upper and lower jaw the values of the size of premolars (more often in boys with wide faces) and incisors (only in boys with a very wide face) are significantly higher than in girls.

Possibilities of the use of new materials, technologies in restorative therapy of defects of hard tissues of teeth and in the prosthetics of dental defects cause the need to

simulate artificial teeth according to their faciological features [7, 8, 9].

In analyzing the differences between the computer tomographic size of the width of the crowns of the teeth, the width of the teeth at the anatomical neck, the distance from the anatomical neck to the apex of the root and the distance from the middle of the cutting edge to the apex of the root in the vestibular-tongue direction (see Table 4) between the girls with a very wide and wide face, there are no established or trendy differences.

On the upper jaw of the boys of Podillia with a broad face A. A. Glushak [4] established significantly lower, or tendency to smaller values of the vestibular-tongue sizes of the canine tooth than that of the representatives with other types of faces and lateral incisors than the boys with middle faces; and for girls with middle face, the predominantly large vestibular-tongue sizes of premolars than those with other facial features and first molars than girls with a broad face. In the lower jaw, only for medium-faced girls have established reliable or tended to greater values of the vestibular-tongue dimensions of the incisors and the first molar than girls with a wide face, as well as the vestibular-tongue dimensions of the left second premolar and canine, than in girls with a very wide face.

The results of the study broaden the existing understanding of the anatomical structure of permanent teeth in patients with different types of face, which increases the efficiency of treatment of defects in teeth and dentitions.

Conclusions

1. In boys with a wide type of face and girls with wide and very broad types of faces with physiological bite, population features of computed-tomographic size of the width of crowns of teeth, teeth width at the anatomical neck, the distance from the anatomical neck to apex of the root and distance from the middle of the cutting edge to the apex of the root in the vestibular-tongue direction are set.

2. In broad-faced boys, there are significantly higher values of the majority of computer-tomographic sizes of the teeth in the vestibular-tongue direction than girls with a similar type of face.

3. Reliable or tendency differences of computed-tomographic size of the width of the crowns of the teeth, the width of the teeth at the level of the anatomical neck, the distance from the anatomical neck to the apex of the root and the distance from the middle of the cutting edge to the apex of the root in the vestibular-tongue direction between the girls with very wide and wide face not installed.

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Позур Т. П.

КОМП'ЮТЕРНО-ТОМОГРАФІЧНІ ПРИСІНКОВО-ЯЗИКОВІ РОЗМІРИ ЗУБІВ У ЮНАКІВ ТА ДІВЧАТ З НОРМАЛЬНОЮ ОКЛЮЗІЄЮ В ЗАЛЕЖНОСТІ ВІД ТИПІВ ОБЛИЧЧЯ

Дослідження комп'ютерно-томографічних розмірів зубів у представників із різними типами обличчя при фізіологічній оклюзії дає можливість стоматологам здійснити коректний підхід до ортодонтичного лікування пацієнтів в клініці ортодонції, ортопедичної стоматології та щелепно-лицевої хірургії. Мета роботи - встановити межі процентильного розмаху та особливості комп'ютерно-томографічних присінково-язикових розмірів зубів у юнаків і дівчат із фізіологічним прикусом в залежності від типу обличчя. Первинні комп'ютерно-томографічні розміри ширини коронок зубів, ширини зубів на рівні анатомічної шийки, відстані від анатомічної шийки до апексу кореня та відстані від середини ріжучого краю до апексу кореня зубів у присінково-язиковому напрямку, а також кефалометричні параметри 44 юнаків та 50 дівчат із нормальною оклюзією наближеною до ортогнатичного прикусу отримані з банку даних науково-дослідного центру Вінницького національного медичного університету ім. М. І. Пирогова. Тип обличчя визначали за допомогою морфологічного індексу Гарсона. Статистичну обробку отриманих результатів проводили за допомогою ліцензійного статистичного програмного пакету "Statistica 6,0" з використанням непараметричних методів оцінки. У юнаків і дівчат із фізіологічним прикусом із різними типами обличчя визначені межі процентильного розмаху ширини коронок зубів, ширини зубів на рівні анатомічної шийки, відстані від анатомічної шийки до апексу кореня та відстані від середини ріжучого краю до апексу кореня у присінково-язиковому напрямку. Аналіз статистичних розбіжностей даних розмірів зубів показав, що усі показники відстані від анатомічної шийки до апексу кореня та відстані від середини ріжучого краю до апексу кореня відповідних зубів у присінково-язиковому напрямку в юнаків із широким обличчям достовірно більші, ніж у дівчат із широким обличчям; переважна більшість розмірів ширини коронок зубів і ширини зубів на рівні анатомічної шийки у присінково-язиковому напрямку в юнаків із широким обличчям також достовірно більші ніж у дівчат із широким обличчям. Достовірних або тенденцій відмінностей комп'ютерно-томографічних розмірів зубів у присінково-язиковому напрямку між дівчатами з дуже широким і широким обличчям не встановлено. Отримані результати розширюють уявлення про анатомічну будову постійних зубів у юнаків і дівчат Поділля з фізіологічним прикусом із різними типами обличчя, що дозволить стоматологам

підвищити ефективність лікування дефектів зубів і зубних рядів.

Ключові слова: юнаки, дівчата, тип обличчя, комп'ютерна томографія, присінково-язикові розміри зубів, фізіологічний прикус, статеві відмінності.

Позур Т. П.

КОМПЬЮТЕРНО-ТОМОГРАФИЧЕСКИЕ ПРЕДДВЕРНО-ЯЗЫКОВЫЕ РАЗМЕРЫ ЗУБОВ У ЮНОШЕЙ И ДЕВУШЕК С НОРМАЛЬНОЙ ОККЛЮЗИЕЙ В ЗАВИСИМОСТИ ОТ ТИПОВ ЛИЦА

Исследования компьютерно-томографических размеров зубов у представителей с различными типами лица при физиологической окклюзии позволяет стоматологам осуществить корректный подход к ортодонтическому лечению пациентов в клинике ортодонтии, ортопедической стоматологии и челюстно-лицевой хирургии. Цель работы - установить границы процентильного размаха и особенности компьютерно-томографических преддверно-языковых размеров зубов у юношей и девушек с физиологическим прикусом в зависимости от типа лица. Первичные компьютерно-томографические размеры ширины коронок зубов, ширины зубов на уровне анатомической шейки, расстояния от анатомической шейки до апекса корня и расстояния от середины режущего края до апекса корня зубов в преддверно-языковом направлении, а также кефалометрические параметры 44 юношей и 50 девушек с нормальной окклюзией приближенной к ортогнатическому прикусу полученные из банка данных научно-исследовательского центра Винницкого национального медицинского университета им. Н. И. Пирогова. Тип лица определяли с помощью морфологического индекса Гарсона. Статистическую обработку полученных результатов проводили с помощью лицензионного статистического программного пакета "Statistica 6,0" с использованием непараметрических методов оценки. У юношей и девушек с физиологическим прикусом с различными типами лица определены границы процентильного размаха ширины коронок зубов, ширины зубов на уровне анатомической шейки, расстояния от анатомической шейки до апекса корня и расстояния от середины режущего края до апекса корня в преддверно-языковом направлении. Анализ половых различий данных размеров зубов показал, что все показатели расстояния от анатомической шейки до апекса корня и расстояния от середины режущего края до апекса корня соответствующих зубов в преддверно-языковом направлении у юношей с широким лицом достоверно больше, чем у девушек с широким лицом; подавляющее большинство размеров ширины коронок зубов и ширины зубов на уровне анатомической шейки в преддверно-языковом направлении у юношей с широким лицом также достоверно больше чем у девушек с широким лицом. Достоверных или тенденций различий компьютерно-томографических размеров зубов в преддверно-языковом направлении между девушками с очень широким и широким лицом не установлено. Полученные результаты расширяют представление об анатомическом строении постоянных зубов у юношей и девушек Подолья с физиологическим прикусом с различными типами лица, что позволит стоматологам повысить эффективность лечения дефектов зубов и зубных рядов.

Ключевые слова: юноши, девушки, тип лица, компьютерная томография, преддверно-языковые размеры зубов, физиологический прикус, половые различия.