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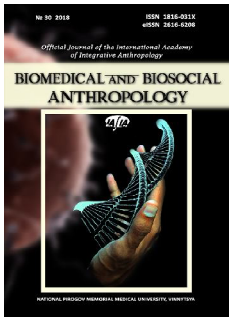

Cephalometric studies of Ukrainian boys and girls with physiological bite by the method of Charles J. Burstone

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The analysis of scientific literature points to significant ethnic, racial, age and sexual differences in cephalometric indices obtained by the method of C. J. Burstone, which necessitates conducting similar cephalometric studies among different age and sex groups of the population of Ukraine with physiological bite. The purpose of the study is to establish and analyze the cephalometric parameters by the method of C. J. Burstone in boys and girls of the Podillia region of Ukraine with orthognathic bite. Primary lateral teleroentgenograms of 38 boys and 55 girls with normal occlusion close to orthognathic bite, obtained using the Veraviewepocs 3D device, Morita (Japan), were taken from the data bank of the research center of the National Pirogov Memorial Medical University, Vinnytsya. Cephalometric measurements were performed according to the recommendations of C. J. Burstone. The statistical processing of the obtained results was carried out in the licensed package "Statistica 6.0" using nonparametric methods for evaluating the obtained results. When comparing the cephalometric parameters used in the analysis of C. J. Burstone between boys and girls with orthognathic bite in boys, the values of the following distances are significantly higher: Ar-Pt (Posterior Section of Cranial Base), Pt-N (Anterior Section of Cranial Base), N-ANS (Anterior Upper Facial Height), ANS-Gn (Anterior Lower Facial Height), PNS-N (Posterior Upper Facial Height), 1I-MP (Distance of Incisal Edge of 1L to Palatal Plane), 6u-NF (Distance of Mesial Cusp of 6u to Palatal Plane), 6I-MP (Distance of Mesial Cusp of 6I to Mandibular Plane), ANS-PNS (Maxillary Length), Ar-Go (Ramus Length), Go-Pog (Mandibular Length), B-Pog (distance from point Pog to point B, parallel to mandibular plane) and A-B (Distance of A to B on Occl. Plane); and in girls - only angle OP-HP (Angle of Occl. to Horizontal Plane). More than half of the cephalometric parameters obtained in the boys and girls of Podillia with orthognathic bite have reliable or tendency differences with the magnitude of the parameters given by C. J. Burstone, which confirms the need to establish their regional standards for correct use in Ukraine.

Keywords: *side teleroentgenograms of the head, cephalometry, young men and girls of Podillia with orthognathic bite, analysis by C. J. Burstone.*

Introduction

The human face plays a key role in the human communication function. This is the most open and accessible part of the body. In our time, as never before, a beautiful face is one of the ways of a person's success in society. In particular, a beautiful, harmonious smile plays a key role in this [5, 8, 17, 19].

This is what generates an increasing demand for treatment in orthodontics and related specialties. However, doctors may not always or completely not appreciate the situation, since building a correct smile requires in-depth knowledge and understanding of aesthetics not from their own point of view, but on the basis of ethnic and regional peculiarities. The smile of the patient should be balanced with other facial parts formed by the bones of the facial skull and covering them soft tissues. Proper evaluation of the parameters necessary for this is impossible without using the cephalometric method of study [14, 18, 25].

The solution to this question could be the use of cephalometric analysis using the method C. J. Burstone, which has become widespread in most countries of the world and actively implemented by doctors orthodontists in practice, which is based on the use of straightforward measurements between

the anatomical points of the skull [6]. Thus, the study aimed at assessing the effectiveness of the hand-made cephalometric analysis by C. J. Burstone [24] and using computer programs [13] showed a significantly greater accuracy of the cephalometric method by C. J. Burstone (50%) compared with such leading programs as Dentofacial Planner Plus and Dolphin Image (31.2% and 18.8% respectively).

However, the analysis of foreign literary sources, namely the results of research by scientists from India [12, 15, 16, 20, 22, 23], Pakistan [21], Malaysia [1], Bangladesh [2], the countries of the Middle East [3, 4] over the last few years indicates significant age, sexuality, and, most importantly, ethnic and racial differences in cephalometric indices obtained by this methodology (because C. J. Burstone work was conducted on US residents of European origin with a bright skin color [7]).

Thus, there is a need for a cephalometric study among the various age and sex groups of the population of Ukraine with the correct (orthognathic) bite, the results of which laid the foundation for better provision of orthodontic care.

The purpose of the work - to establish and analyze the cephalometric parameters by the method of C. J. Burstone in boys and girls of Podillia region of Ukraine with orthognathic bite.

Materials and methods

Primary lateral teleroentgenograms of 38 boys (aged from 17 to 21) and 55 girls (aged from 16 to 20 years) with normal occlusion close to orthognathic bite, obtained using the Veraviewepocs 3D device, Morita (Japan), were taken from a data bank of Research Center of National Pirogov Memorial Medical University, Vinnytsya.

According to the cephalometric method by C. J. Burstone [6] determined the following indices (Fig. 1-3):

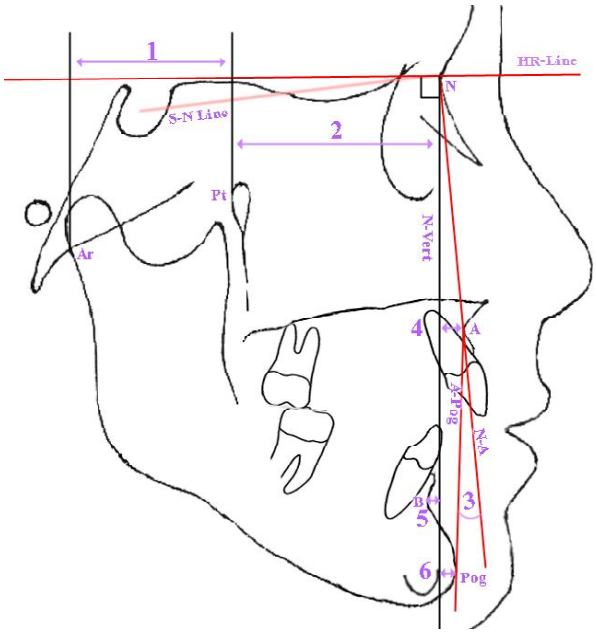

Fig. 1. Cranial Base and Horizontal skeletal indicators determined by cephalometric method of C. J. Burstone [6]. 1. **Ar-Pt** (Posterior Section of Cranial Base) - distance from **Ar** to **Pt**, defines the length of the back of the skull base, parallel to the horizontal line by Burstone (**HR Line**) (line is carried through N and seven degrees higher than the S-N line) (mm); 2. **Pt**-N (Anterior Section of Cranial Base) - distance from **Pt** to N, defines the length of the front of the skull base, parallel to the horizontal line by Burstone (**HR Line**) (mm); 3. **NAPog** (Convexity) - defines convexity of the face, is formed by lines **N-A** and **A-Pog** (°); 4. N-A (Maxillary Position) - distance from perpendicular (N-Vert) to the horizontal line by Burstone (**HR Line**) omitted from the point **N**, and point **A** (mm); 5. **N-B** (Mandibular Position) - distance from the perpendicular to the horizontal line by Burstone (**HR Line**) omitted from the point **N**, and point **B** (mm); 6. **N-Pog** (Position of Chin) - distance from perpendicular (N-Vert)) to the horizontal line by Burstone (**HR Line**) omitted from the point **N**, and point **Pog** (mm).

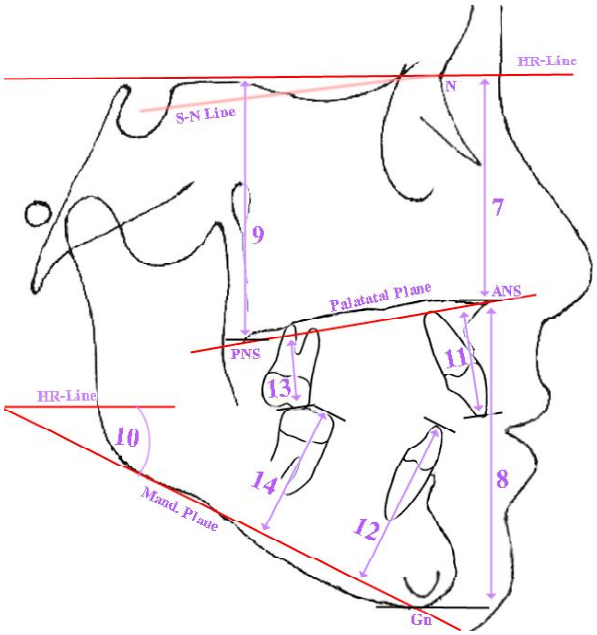

Fig. 2. Vertical skeletal and dental indicators determined by cephalometric method of C. J. Burstone [6]. 7. **N-ANS** (Anterior Upper Facial Height) - determines the length of the upper part of the front face height, the distance from the point **N** to **ANS** (mm); 8. **ANS-Gn** (Anterior Lower Facial Height) - determines the length of the upper part of the front height of the face from the point **ANS** to **Gn** (mm); 9. **PNS-N** (Posterior Upper Facial Height) - defines the length of the upper part of the posterior face height from the point **PNS**) to the horizontal line by Burstone (**HR Line**) (mm); 10. **MP-HP** (Angle of Mand. to Horizontal Plane) - is formed by the mandibular plane **Mand.Plane**) and horizontal line by Burstone **HR Line** (°); 11. **1u-NF** (Distance of Incisal Edge of 1u to Palatal Plane) - length perpendicular to the line **ANS-PNS** conducted from the point **Is1u** (mm); 12. **1l-MP** (Distance of Incisal Edge of 1L to Palatal Plane) - length perpendicular to the line **Mand.Plane** omitted from the point **Is1L** (mm); 13. **6u-NF** (Distance of Mesial Cusp of 6u to Palatal Plane) - length perpendicular to the line **ANS-PNS** conducted from the point **6U** (mm); 14. **6l-MP** (Distance of Mesial Cusp of 6l to Mand.Plane) - length perpendicular to the line **Mand.Plane** omitted from the point **6L** (mm).

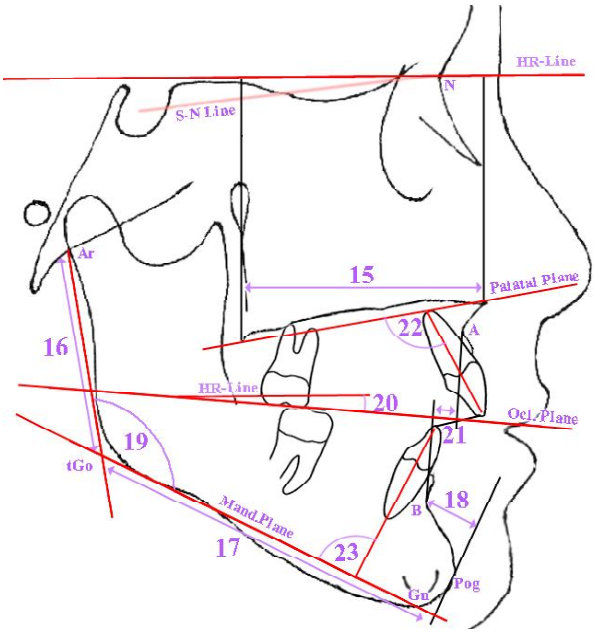

Fig. 3. Maxilla-Mandible and Dental indicators determined by cephalometric method of C. J. Burstone [6]. 15. **ANS-PNS** (Maxillary Length) - distance from the point **ANS** to the point **PNS** parallel to the horizontal line by Burstone (**HR-Line**) (mm); 16. **Ar-Go** (Ramus Length) - distance from the point **Ar** to the point **tGo** (mm); 17. **Go-Pog** (Mandibular Length) - distance from the point **Pog** to the point **tGo** (mm); 18. **B-Pog** - distance from the point **Pog** to the point **B**, parallel to the mandibular plane (mm); 19. **arGoMe/ArGoGn** (Gonial Angle) - angle formed by lines **Ar-tGo** and **tGo-Gn** (°); 20. **OP-HP** (Angle of Occl. to Horizontal Plane) - angle formed by lines **apOcP-ppOcP** and **HR-Line** (°); 21. **A-B** (Distance of A to B on Occl. Plane) - distance from the point **A** to the point **B** on the closure plane (**apOcP-ppOcP**) (mm); 22. **Max1-SpP/Max1-NF** (Angle of Axis of 1u to Palatal Plane) - angle formed by lines **Ap1u-Is1u** and **ANS-PNS** (Palatal Plane) (°); 23. **Mand1-MeGo/Mand1-Mp** (Angle of Axis of 1l to Mand. Plane) - angle formed by lines **Is1L-Ap1L** and **tGo-Gn** (Mand.Plane) (°).

The statistical processing of the obtained results was carried out in the license package "Statistica 6.0" using nonparametric estimation methods. The reliability of the difference between independent quantitative values was determined using the Man-Whitney U-criterion and Other Significance Tests.

Results

Indicators of Cranial Base and Horizontal skeletal indices determined by the cephalometric method C. J. Burstone [6] (mean with standard deviation and percentile scale) in Ukrainian boys and girls with orthognathic bite are presented in the table. 1.

Vertical skeletal and dental indices, determined by the cephalometric method C. J. Burstone in Ukrainian boys and girls with orthognathic bite are presented in the table. 2.

Maxilla-Mandible and Dental indices, determined by C. J. Burstone cephalometric method in Ukrainian boys and girls with orthognathic bite are presented in the table. 3.

Discussion

When comparing the cephalometric parameters used in the analysis of C. J. Burstone between boys and girls with normal occlusion close to orthognathic bite in boys significantly higher ($p<0,01$-$0,001$) distances values are set for Ar-Pt (Posterior Section of Cranial Base), Pt-N (Anterior Section of Cranial Base), N-ANS (Anterior Upper Facial Height), ANS-Gn (Anterior Lower Facial Height), PNS-N (Posterior Upper Facial Height), 1l-MP (Distance of Incisal Edge of 1L to Palatal Plane), 6u-NF (Distance of Mesial Cusp of 6u to Palatal Plane), 6l-MP (Distance of Mesial Cusp of 6l to Mandibular Plane), ANS-PNS (Maxillary Length), Ar-Go (Ramus Length), Go-Pog (Mandibular Length), B-Pog (distance from point Pog to point B, parallel to mandibular plane) and A-B (Distance of A to B on Occl. Plane); and in girls - significantly higher ($p<0,05$) OP-HP angle value (Angle of Occl. to Horizontal Plane) (see tabl. 1-3).

It should be noted that part of the indicators determined by the cephalometric method of C. J. Burstone (Convexity, Ramus Length, Mandibular Length, Gonial Angle, Angle of Axis of 1u to Palatal Plane and Angle of Axis of 1l to Mandibular Plane) also used in the analyzes proposed by Schmuth G., Holdaway R. A. and Schvartz A. M. and reflected in the research Dmitriev M. O. and others [9-11].

Comparing the cephalometric parameters obtained by C. J. Burstone on inhabitants of the United States of European origin [6] with the indices obtained by us in boys and girls of Podillia with orthognathic bite, the expressed differences for the following indices are set:

among the indicators Cranial Base and Horizontal skeletal indicators - Ar-Pt (Posterior Section of Cranial Base), N-B (Mandibular Position), N-Pog (Position of Chin) both in boys and girls; Pt-N (Anterior Section of Cranial Base) and N-A (Maxillary Position) only in boys (see tabl. 1);

among Vertical skeletal and dental indicators - MP-HP (Angle of Mand. to Horizontal Plane) both in boys and girls; N-ANS (Anterior Upper Facial Height) and ANS-Gn (Anterior Lower Facial Height) only in boys; PNS-N (Posterior Upper Facial Height), 1u-NF (Distance of Incisal Edge of 1u to Palatal Plane), 1l-MP (Distance of Incisal Edge of 1L to Palatal Plane), 6u-NF (Distance of Mesial Cusp of 6u to Palatal Plane) and 6l-MP (Distance of Mesial Cusp of 6l to Mand.Plane) only in girls (see tabl. 2);

among Maxilla-Mandible and Dental indicators - Max1-SpP/Max1-NF (Angle of Axis of 1u to Palatal Plane) and Mand1-MeGo/Mand1-Mp (Angle of Axis of 1l to Mand. Plane) both in boys and girls; ANS-PNS (Maxillary Length), Ar-Go (Ramus Length), Go-Pog (Mandibular Length) and arGoMe/ArGoGn (Gonial Angle) only in boys; B-Pog (distance from point Pog to point B, parallel to mandibular plane) only in girls (see tabl. 3).

Thus, more than half of the cephalometric parameters obtained in boys and girls of Podillia with orthognathic bite have differences with the magnitude of these parameters obtained by C. J. Burstone, which confirms the necessity

Table 1. Cranial Base and Horizontal Skeletal indicators determined by C J. Burstone cephalometric method in boys and girls with orthognathic bite.

Indicator	Value by C. J. Burstone (M±σ)	Boys		Girls		p
		M±σ	25p-l. 75p-l	M±σ	25p-l. 75p-l	
Ar-Pt (mm)	32.8±1.9	34.22±5.32t	31.5 - 38.5	31.09±3.41*	29.0 - 33.0	<0.001
Pt-N (mm)	50.9±3.0	54.63±8.59*	51.5 - 55.6	50.73±4.59	47.7 - 52.5	<0.001
N-A-Pog (°)	2.6±5.1	1.388±4.786	-2.3 - 5.3	0.996±5.077	-2.6 - 4.3	>0.05
N-A (mm)	-2.0±3.7	-0.005±3.811*	-2.5 - 2.8	-1.469±3.466	-3.0 - 0.7	>0.05
N-B (mm)	-6.9±4.3	-4.029±6.536*	-9.2 - 1.0	-4.982±4.976*	-9.7 - -1.1	>0.05
N-Pog (mm)	-6.5±5.1	-1.753±7.858*	-8.1 - 3.8	-3.607±5.880*	-8.5 - 1.0	>0.05

Notes: here and in the following tables M±σ - average ± standard deviation; 25p-l, 75p-l - percentile scale; p - the validity of the difference between the respective indicators between boys and girls; * - reliable differences in the respective indices between boys or girls of Podillia with values of indicators set by C. J. Burstone; t - trends in the differences between the respective indices between boys or girls of Podillia with the values of indicators set by C. J. Burstone.

Table 2. Vertical skeletal and dental indicators by cephalometric method C. J. Burstone in boys and girls with orthognathic bite.

Indicator	Value by C. J. Burstone (M±σ)	Boys		Girls		p
		M±σ	25p-l. 75p-l	M±σ	25p-l. 75p-l	
N-ANS (mm)	50.0±2.4	52.38±8.85t	49.0 - 53.4	48.98±4.95	46.2 - 50.1	<0,001
ANS-Gn (mm)	61.3±3.3	64.98±10.95*	61.0 - 67.0	60.22±6.14	55.8 - 62.5	<0,001
PNS-N (mm)	50.6±2.2	52.31±8.80	49.4 - 52.6	49.01±4.70*	46.3 - 50.2	<0,001
MP-HP (°)	24.2±5.0	19.52±6.95*	14.5 - 24.5	21.94±5.07*	17.9 - 24.8	>0,05
1u-NF (mm)	27.5±1.7	27.71±5.59	24.7 - 28.9	26.41±3.10*	24.2 - 28.2	>0,05
1l-MP (mm)	40.8±1.8	41.03±6.02	38.5 - 42.3	37.52±3.55*	35.1 - 38.9	<0,001
6u-NF (mm)	23.0±1.3	23.76±4.75	22.0 - 24.7	21.47±2.29*	19.9 - 23.0	<0,001
6l-MP (mm)	32.1±1.9	33.17±4.37	32.1 - 33.8	30.42±3.75*	28.6 - 31.4	<0,001

Table 3. Maxilla-Mandible and Dental indicators by cephalometric method C. J. Burstone in boys and girls with orthognathic bite.

Indicator	Value by C. J. Burstone (M±σ)	Boys		Girls		p
		M±σ	25p-l. 75p-l	M±σ	25p-l. 75p-l	
ANS-PNS (mm)	52.6±3.5	55.73±7.70*	52.3 - 56.7	51.45±4.30	49.1 - 52.6	<0.001
Ar-Go (mm)	46.8±2.5	53.91±9.69*	50.1 - 55.4	47.45±6.17	44.0 - 49.4	<0.001
Go-Pog (mm)	74.3±5.8	80.11±12.57*	74.3 - 82.2	74.05±7.44	71.0 - 74.9	<0.001
B-Pog (mm)	7.2±1.9	7.613±2.097	6.4 - 8.5	6.587±1.532t	5.6 - 7.3	<0.01
arGoMe/ArGoGn (°)	122.0±6.9	119.5±6.3t	114.8 - 124.4	120.0±7.2	114.3 - 125.7	>0.05
OP-HP (°)	7.1±2.5	5.668±5.486	2.5 - 9.3	8.235±4.155	4.5 - 11.7	<0.05
A-B (mm)	-0.4±2.5	0.234±8.907	-1.6 - 2.6	-1.551±2.44*7	-3.0 - -0.3	<0.01
Max1-SpP/ Max1-NF (°)	112.5±5.3	67.46±6.38*	63.0 - 71.8	67.89±5.94*	63.1 - 72.4	>0.05
Mand1-MeGo/ Mand1-Mp (°)	95.9±5.7	83.69±8.49*	78.4 - 90.3	85.50±6.12*	81.2 - 90.6	>0.05

of establishing their regional norms for correct use in Ukraine.

On the basis of the results obtained, in subsequent studies, it is planned to construct regression models of individual indices that characterize the positions of each individual tooth relative to each other, to the bone cranial structures and profile of the face, depending on the metric characteristics of the skull, which usually do not change during the surgical and orthodontic treatment; as well as indicators of the tooth-jaw system, the definitions of which most often need to be oriented when performing orthodontic treatment of adolescent and youth patients and those with already formed bone skeleton, which may change the width, length, angles and position of the upper and lower jaws.

Conclusion

1. The following sex differences in the cephalometric parameters used in the analysis of C. J. Burstone between boys and girls of Podillia with normal occlusion close to

orthognathic bite are set: boys have significantly higher ($p<0,01-0,001$) values of distances Ar-Pt, Pt-N, N-ANS, ANS-Gn, PNS-N, 1I-MP, 6u-NF, 6l-MP, ANS-PNS, Ar-Go, Go-Pog, B-Pog та A-B; and in girls - significantly greater ($p<0,05$) value of the angle OP-HP.

2. Differences of cephalometric parameters obtained by C. J. Burstone from the indices obtained in boys and girls of Podillia with orthognathic bite are established: regardless of the gender for distances Ar-Pt, N-B, N-Pog and angles MP-HP, Max1-SpP/Max1-NF, Mand1-MeGo/Mand1-Mp; only in boys - for distances Pt-N, N-A, N-ANS, ANS-Gn, ANS-PNS, Ar-Go, Go-Pog and angle arGoMe/ArGoGn; only in girls - for distances PNS-N, 1u-NF, 1l-MP, 6u-NF, 6l-MP and B-Pog.

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ЦЕФАЛОМЕТРИЧНЕ ДОСЛІДЖЕННЯ УКРАЇНСЬКИХ ЮНАКІВ ТА ДІВЧАТ З ФІЗІОЛОГІЧНИХ ПРИКУСОМ ЗА МЕТОДОМ CHARLES J. BURSTONE

Аналіз наукової літератури вказує на значні етнічні, расові, вікові та статеві розбіжності цефалометричних показників, отриманих за методикою C. J. Burstone, що обумовлює необхідність проведення подібних цефалометричних досліджень серед різних вікових та статевих груп населення України з фізіологічним прикусом. Мета дослідження - встановити та проаналізувати цефалометричні параметри за методом C. J. Burstone у юнаків і дівчат Подільського регіону України з ортогнатичним прикусом. Первинні бокові телерентгенограми 38 юнаків і 55 дівчат з нормальною оклюзією наближеною до ортогнатичного прикусу, отримані за допомогою пристрою Veraviewepocs 3D, Моріта (Япония), взяті з банку даних науково-дослідного центру Вінницького національного медичного університету ім. М. І. Пирогова. Цефалометричні вимірювання проводили згідно рекомендацій C. J. Burstone. Статистична обробка отриманих результатів проведена в ліцензійному пакеті "Statistica 6.0" з використанням непараметричних методів оцінки отриманих результатів. При порівнянні цефалометричних параметрів які використовуються в аналізі C. J. Burstone між юнаками та дівчатами з ортогнатичним прикусом у юнаків встановлені достовірно більші значення наступних відстаней: Ar-Pt (задня частина основи черепа), Pt-N (передня частина основи черепа), N-ANS (передня верхня висота лиця), ANS-Gn (передня нижня висота лиця), PNS-N (задня верхня висота лиця), 1I-MP (відстань від різального краю найбільш виступаючого до переду нижнього присереднього різця, до нижньощелепної площини), 6u-NF (відстань від ближньощічного вістря верхнього першого великого кутнього зуба до піднебінної площини), 6l-MP (відстань від ближньощічного вістря нижнього першого великого кутнього зуба до нижньощелепної площини), ANS-PNS (довжина верхньої щелепи), Ar-Go (довжина гілки нижньої щелепи), Go-Pog (довжина основи нижньої щелепи), B-Pog (відстань від точки Pog до точки B, паралельно до нижньощелепної площини) та A-B (відстань від точки A до точки B на змикальній площині); а у дівчат - лише кута OP-HP (кут нахилу змикальної площини). Більш ніж половина цефалометричних параметрів отриманих в юнаків і дівчат Поділля з ортогнатичним прикусом мають достовірні або тенденції відмінностей з величиною даних параметрів отриманих C. J. Burstone, що підтверджує необхідність встановлення їх регіональних нормативів для коректного використання в Україні.

Ключові слова: *бокові телерентгенограми голови, цефалометрія, юнакі та дівчата Поділля з ортогнатичним прикусом, аналіз C. J. Burstone.*

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ЦЕФАЛОМЕТРИЧЕСКОЕ ИССЛЕДОВАНИЕ УКРАИНСКИХ ЮНОШЕЙ И ДЕВУШЕК С ФИЗИОЛОГИЧЕСКИМ ПРИКУСОМ МЕТОДОМ CHARLES J. BURSTONE

Анализ научной литературы указывает на значительные этнические, расовые, возрастные и половые различия цефалометрических показателей, полученных по методике C. J. Burstone, что обусловливает необходимость проведения подобных цефалометрических исследований среди различных возрастных и половых групп населения Украины с физиологическим прикусом. Цель исследования - установить и проанализировать цефалометрические параметры по методу C. J. Burstone у юношей и девушек Подольского региона Украины с ортогнатическим прикусом. Первичные боковые телерентгенограмы 38 юношей и 55 девушек с нормальной окклюзией приближенной к ортогнатическому прикусу, получены с помощью устройства Veraviewepocs 3D, Морита (Япония), взяты из банка данных научно-исследовательского центра Винницкого национального медицинского университета им. Н. И. Пирогова. Цефалометрические измерения проводили согласно рекомендациям C. J. Burstone. Статистическая обработка полученных результатов проведена в лицензионном пакете "Statistica 6.0" с использованием непараметрических методов оценки полученных результатов. При сравнении цефалометрических параметров используемых в анализе C. J. Burstone между юношами и девушками с ортогнатическим прикусом у юношей установлены достоверно большие значения следующих расстояний: Ar-Pt (задняя часть основания черепа), Pt-N (передняя часть основания черепа), N-ANS (передняя верхняя высота лица), ANS-Gn (передняя нижняя высота лица), PNS-N (задняя верхняя высота лица), 1I-MP (расстояние от режущего края наиболее выступающего к переду нижнего медиального резца, к нижнечелюстной плоскости), 6u-NF (расстояние от ближне-щечного острия верхнего первого большого коренного зуба к небной плоскости), 6l-MP (расстояние от ближне-щечного острия нижнего первого большого коренного зуба к нижнечелюстной плоскости), ANS-PNS (длина верхней челюсти), Ar-Go (длина ветви нижней челюсти), Go-Pog (длина основания нижней челюсти), B-Pog (расстояние от точки Pog к точке B, параллельно нижнечелюстной плоскости) и A-B (расстояние от точки A к точки B на замыкающей плоскости); а у девушек - только угла OP-HP (угол наклона замыкающей плоскости). Более половины цефалометрических параметров полученных у юношей и девушек Подолья с ортогнатическим прикусом имеют достоверные или тенденции различий с величиной данных параметров полученных C. J. Burstone, что подтверждает необходимость установления их региональных нормативов для корректного использования в Украине.

Ключевые слова: *боковые телерентгенограмы головы, цефалометрия, юноши и девушки Подолья с ортогнатическом прикусом, анализ C. J. Burstone.*