

DEPENDENCE BETWEEN ANTHROPOMETRIC DATA AND THE DAMAGING OF THE TEETH BY CARIES PROCESS

Shevchenko A.F., Dobrovolska M.K. Horytskyy V.M.,
Bilynskyy O.Y., Holodnyak O.V.

*Department of Preventive Dentistry, Faculty of Dentistry,
Uzhhorod National University, Uzhhorod, Ukraine*

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Introduction. Currently in the literature does not clearly evident the dependence between anthropometric data and the state of hard dental tissues. The new approach will help to predict the possibility of development of hard dental tissue pathologies, depending on the structure of the facial skeleton.

The aim was to establish the depending between the size and the shape of the facial skull and damaging of hard dental tissues.

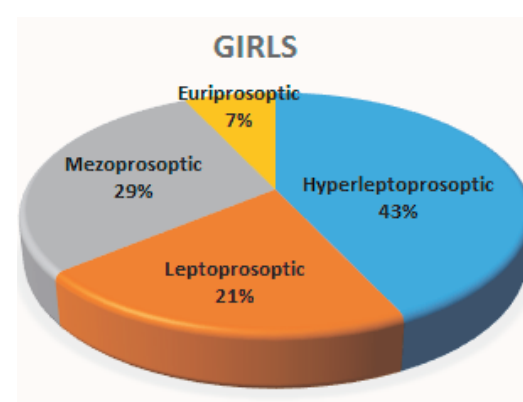
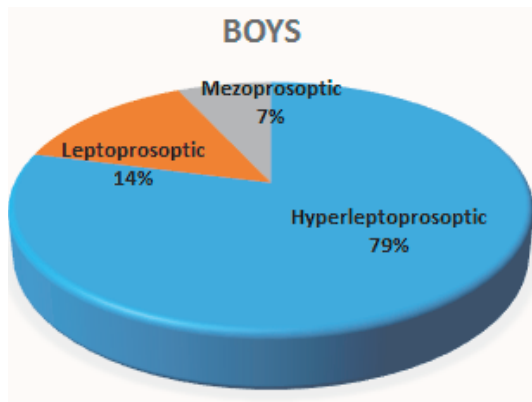
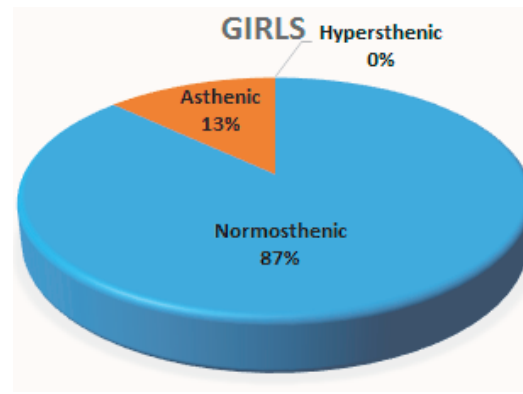
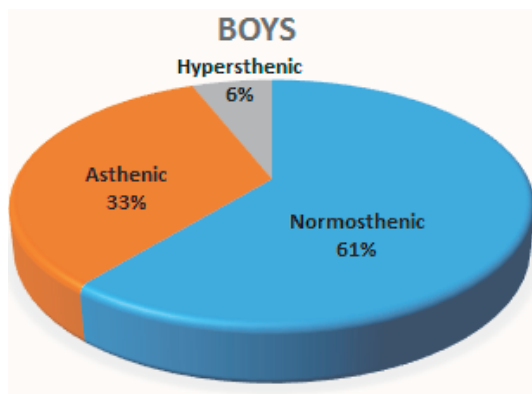
Materials and methods. The exploration involved 30 healthy third-year students of the Faculty of Dentistry (age group 18-25 years). There were 15 girls and 15 boys. During the exploration, was measured the height and the weight of each student, was determined the type of the constitution of the body, were obtained anthropometric data of the facial skull (morphological height of the face and width at level of zygomatic arches). Based on these results, we determined the shape of the face by Garson index. The oral cavity of each student was reviewed, as a result was determined the type of the occlusion, the presence of anomalies of

dentition and individual teeth, the prevalence and intensity of damaging of hard dental tissues.

Results. The anthropometric data showed that the average height of boys was 177 cm, weight 68 kg. The average height of girls was 165 cm, weight 58 kg. According to these indicators were identified the type of constitution of the body of each of the student. 61 % of boys had normosthenic type of constitution, 33% had asthenic type of constitution, 6 % had hypersthenic type of constitution. 87 % of girls were normosthenics and 13% were asthenics. Among girls hypersthenic type of constitution was not found.

During the determination the shape of the face by Garson index, among boys was found that hyperleptoprosopic shape of face (very narrow face) was met in 79%, leptoprosopic shape of face (narrow face) in 14%, mezoprosopic shape of face (average face) only in 7%. Hyperleptoprosopic shape of face at girls was 43%, leptoprosopic - 21%, mezoprosopic and euriprosopic (broad face) respectively were 29% and 7%.

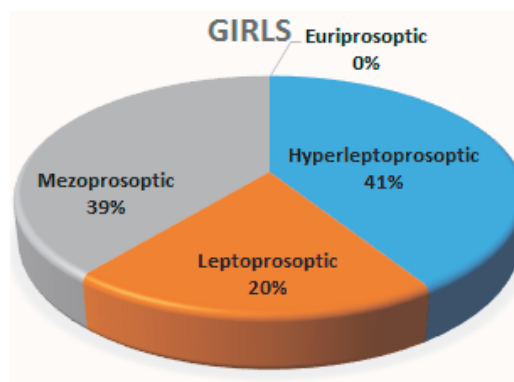
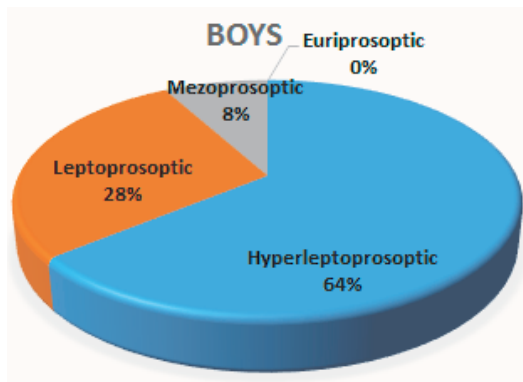
As a result of examination of the oral cavity



physiologic occlusion (orthognathous occlusion, bi-prognathous occlusion) was met in 85% of surveyed students, pathologic occlusion (prognathism, open bite, deep bite) was met in 15% only those with hyperleptoprosopic shape of face. During the exploration the accumulation of lower incisors were found in 86% of individuals with hyperleptoprosopic shape of face.

Oral examination showed that prevalence of caries of third-year students was 84,5% with intensity 405 in terms of the CPR. CPR structure was as follows: teeth affected by caries process - 172, sealed - 217, re-

moved - 16. Prevalence and intensity of carious process was significantly higher in people with existing of anomalies of occlusion and accumulation of the lower incisors. Frequency of lesions in males was observed in 64% of hyperleptoprosopic shape of face, in 28% of leptoprosopic and only in 8% of mezoprosopic form. Girls with hyperleptoprosopic shape of face carious process was met in 41%, with leptoprosopic - in 20%, with mezoprosopic - in 39%. Teeth, affected by caries process in patients with euriprosopic shape of face were not observed.



The frequency of lesions by caries process

Conclusion. Analyzing of the results of the exploration established the depending between anthropometric data and the value of damaging of hard dental tissues, especially carious nature. According to the results the anomalies of occlusion, accumulation of lower incisors and teeth caries process observed mainly in

patients with hyperleptoprosopic shape of the face and leptoprosopic shape of the face. We plan to expand the exploration with the inclusion of odontoglyphic characteristics of the teeth that will help to develop a program of dental rehabilitation.

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