Zaburzenia rozwojowe środkowego odcinka twarzy u chorych z obustronnym rozszczepem wargi i podniebienia ze szczególnym uwzględnieniem nosa

Developmental disturbances of medial part of face of patients with bilateral cleft lip and palate with special consideration of a nose

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Summary
Cleft is a developmental malformation, which is defined as a partial or complete lack of anatomic tissues continuity in typical areas of disorders in embryological face development. The reasons for cleft formation are not completely recognised but many hypotheses indicate both environmental and genetic factors as possible sources. The list of the cleft types is the following: cleft lip, cleft lip and alveolus, isolated cleft palate, cleft lip, alveolus and palate, and combined clefts. The malformation may occur unilateral or bilateral. According to World Health Organization cleft lip and palate is classified in the first ten of the most common developmental disorders, however the bilateral form of pathology is the least popular one. Material and methods: The aim of the study is the anthropometric measurement of a nose of children and adolescents with bilateral cleft lip, alveolus and palate in comparison with data gathered as a result of healthy people measurements. The research was conducted on 26 patients with the malformation: 12 girls and 14 boys at the age range between 7 and 18. The measurements were taken with the use of small bow and slide compasses. For the purpose of the statistical analysis we used formula for standardisation. Both, the arithmetic average and the standard deviation were estimated on the basis of research done on 30 healthy people of same sex and at proper age. Intersexual comparison of these values with the use of t-Student test was done. In order to distinguish homologues features in respect to the comparative group, one-way ANOVA and test post hoc (Duncan) were used. Results: Malformation was mainly reflected in increased width the base of the nose (sbal-sbal), width of nose (al-al) and its small prominence (sn-prn). Increase in head height values together with underdevelopment in sagittal plane was also observable. The increase of upper face height (n-sto) was recognized as stronger in case of females than males with the same malformation. The middle part of face was characterized by increase of height measurements together with sagittal plane underdevelopment. Conclusions: It was stated that the patients with bilateral cleft lip, alveolus and palate tended to have flat and wide nose.