Institute of Experimental Morphology, Pathology and Anthropology with Museum
Bulgarian Anatomical Society

Acta morphologica et anthropologica, 24 (1-2)
Sofia ● 2017

Anthropology and Anatomy

Cranial Base Angulation in Metopic and Non-metopic Cranial Series

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Metopic skulls possess specific distinctive characteristics in the configuration of the neurocranium. Due to the close developmental interrelation between neuro- and basicranium we assumed that the angulation of the cranial base could differ as well. This study aimed to compare the cranial base angle (CBA) in metopic and non-metopic series. The CBA was investigated in a sample of 246 skulls of contemporary adult males – 93 metopic and 156 non-metopic. Lateral projections were captured using digital radiography, performed on an industrial CT system. CBA was constructed between definite craniometric points and measured digitally. CBA was assessed as basilar kyphosis, normal and platybasia. Distribution by categories did not show significant differences between the series. Thus, despite the close interrelation between the neuro- and basicranium, the preservation of the MS connected with a specific construction of the neurocranium was not found to be related to an alteration of the basicranium expressed by CBA.

Key words: metopism, cranial base angle (CBA), platybasia, basilar kyphosis, digital radiography