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PO-031 - (24007) - AGE AND GENDER PREDICTOR WITH SINUS SPHENOIDALIS MEASUREMENTS

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The author declares that there are no conflicts of interest

: Determining gender and age are important steps in identification studies. Cranium is a guiding tool in identification, since the cranium is the most resistant to destruction in corpses damaged in various conditions. The deep location of the sinuses in the cranium makes them more prone to injury and pathological changes. It has been observed that there is a need to determine the role of the sinus sphenoidalis in estimating gender and age in case of damage to other sinuses. The aim of our study is to examine 6 different parameters of the sinus sphenoidalis and to investigate whether there is a determinant structure on the estimation of gender and age and to determine the correlation between cranial measurements and sinus sphenoidalis parameters.

This study was carried out retrospectively on computerized tomography images of 80 people (40 men, 40 awomen) aged 10-85 years. Sinus and cranial measurements were made with the Philips IntelliSpace Portal system and analyzes were made with Statistical Package for Social Sciences (SPSS) 20.0 software.

Among the parameters of the sinus sphenoidalis, we found that the longest horizontal distance of the anterior-posterior wall and only the fronto-occipital distance from the cranium measurements were associated with age. We concluded that, among the parameters of the sinus sphenoidalis, only the horizontal distance of the sinus sphenoidalis anterior wall to the posterior of the processus clinoideus of the sinus sphenoidalis is related to gender ($p=0.043$), but there was no significant difference between cranial measurements and gender.

The deepest and most central sinus sphenoidalis, its relationship with the surrounding structures is important in the development of the skull base. Parameters of the sinus sphenoidalis are a relatively new and reliable method for determining sex and age.

Palavras-chave : sinus sphenoidalis, forensic anthropology, identification