

Professional article

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ANALYSIS OF THE ANATOMICAL VARIATIONS OF THE SUPRAORBITAL TRANSCRANIAL PASSAGE IN SOUTHEAST SERBIAN POPULATION ON VOLUME RENDERED CT SCANS

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The aim of this study was to analyze the variability in the shape and number of supraorbital transcranial passages, supraorbital notch or foramen (SON/F) in southeast Serbian population using three-dimensional computer tomography (3D-CT) with the volume rendering and to evaluate these variations in relation to gender and side.

One hundred and fifteen CT scans of adult subjects (59 men and 56 women) without any skull trauma or malformation, aged 21 to 83 years, were analyzed in our study.

Of 230 supraorbital regions, a smooth supraorbital rim with absent SON/F was observed in 37.39%. The most common type of the supraorbital passage was single SON (53.48%). Single SOF was found in 5.22% and incomplete SOF in 0.44%. The frequency of double SON was 1.30%, double SOF 0.87% and SON with SOF on the same side was 1.30%. There was no statistically significant difference between genders and sides ($p>0.05$). Fourteen various combinations of different types were observed in our material. The most common combination was bilateral SON (33.91%) and bilateral absence of SON/F (20.87%). A very frequent combination was SON on one side and the absence of SON/F on the contralateral side (32.17%). Other combinations of types were rare.

The knowledge of the frequency of the types of supraorbital transcranial passages and their bilateral distribution may be helpful for clinicians in anticipating the exit point of the supraorbital neurovascular bundle during surgical procedures and planning of local anesthesia. *Acta Medica Medianae 2017;56(3):81-87.*

Key words: variations; supraorbital notch; supraorbital foramen; computed tomography; volume rendering