28. MANDIBULAR CANAL - ANATOMO – MORPHOMETRIC AND CLINICAL PECULIARITIES

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Introduction. The initiation of this study was determined by the wide range of morphometric variability, position and location of anatomical elements (channels, orifices, etc.) which, in many cases, they are unsuitable with the topography, during the surgeries not being in accordance with the described norm in the specialized bibliographic sources.

Aim of study. The aim of the study is to evaluate and establish the anatomo-morphometric peculiarities and the individual anatomical variability of the mandibular canal, including the mental orifice, based on the analysis of bibliographic data and materials of own investigations.

Methods and materials. Through bibliographic data analysis from the literature, scientific publications on mandible structure, mandibular canal variants and anomalies. A retrospective study was performed, which included 55 radiological images (orthopantogram), of adolescents and adults of different age groups (males - 23 and females - 32), with their average age, respectively, men - 45.47 years, women - 44.71 years. As a research method, it served comparative analysis of the topography and trajectory variants of the mandibular canal on orthopantomographs.

Results. Morphometric parameters were evaluated bilateral (right / left) distance from the mandibular canal to the upper edge of the alveolar apophysis of the mandible (alveolar ridge) at the incisor-canine level, at the premolar-molar level and at the retromolar level (growth area), as well as the trajectory of the mandibular canal depending on gender. As a result of the evaluation, it was established that in females the greatest distance from the mandibular canal to the upper edge of the alveolar process of the mandible.

Conclusion. Three variants of the mandibular canal trajectory were established: for females - semi-arched - in 59.3%, curved - in 21.9% and in the cross - in 18.8%, and for males, respectively, 56.5%, 26.1% and 17.4%. The topography of the mandibular canal is variable, it requires special attention in performing surgical procedures, such as the implant with the mandible involvement.