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**VISUALIZATION OF THE MAXILLARY ARTERY IN CBCT DATA OF DENTAL PATIENTS**

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**Objectives.** In the structure of the outpatient maxilla-facial surgical pathology inflammatory diseases of the maxillary sinus are significant and they are one of the chief reasons for the hospitalization of patients. Understanding the anatomy of maxillary sinus with 3D CT scan should be included in appropriate presurgical treatment planning.

**Aim:** the aim of the study was to determine the visualization and diameter of the maxillary artery according the CBCT data of dental patients, to analyze the relationship between the visualization of the maxillary artery, its diameter and the chronic maxillary sinusitis presence.

**Materals and Methods.** The data of 44 CBCT results was analyzed for 24 patients with chronic maxillary sinusitis (48 sinuses, observation group 1), of 20 patients without pathological processes in the maxillary sinus (40 sinuses, comparison group 2). All the CBCTs randomly selected by patients who visited dental outpatient clinics of Minsk ("5$^{th}$ outpatient clinic", "31 $^{th}$ outpatient clinic", 2$^{nd}$ dental department), Republic of Belarus, during the period from 2018 to 2020 they were analyzed by GALILEOS program.

**Results.** It was revealed after the analysis that the maxillary artery was not detected in group 1 in 25% (12) patients, while in group 2 the maxillary artery was not detected in 5% (2) patients. Determining the diameter of the maxillary artery, it was revealed that in patients of group 1, the diameter of the artery 0.1-0.99 mm was determined in 91.7% (33) cases, in patients of group 2 - in 92.2% (35). The diameter of the maxillary artery 1.0 mm or more in patients of group 1 was determined in 8.3% (3) of observations, in patients of group 2 - in 7.8% (3).

**Conclusion.** It was found as a result of the study that in patients of group 1 (who had chronic maxillary sinusitis) the maxillary artery was not visualized 5 times more often than in patients of group 2 (comparison group, the results of patients without maxillary sinus). This fact may indicate the ischemia of the maxillary tissues in patients with chronic maxillary sinusitis. According the diameter of the maxillary arteries in groups 1 and 2 there was no significant difference revealed.