An Assessment of the Posterior Superior Alveolar Artery Using Cone Beam CT-Scan

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**Purpose:** The purpose of this study was to analyze the differences of the diameter of the posterior superior alveolar artery (PSAA) and the distance of its inferior border from the sinus floor on Cone-beam CT images according to age and gender.

**Materials & Methods:** CBCT images demonstrating the presence of PSAA in 60 subjects, which were divided into 6 groups according to age & gender: 21-40 Male, 41-60 Male, 61-80 Male, 21-40 Female, 41-60 Female, 61-80 Female. The diameter of PSAA and the distance of its inferior border from the sinus floor were measured.

**Results:** The mean diameter of the PSAA on CT images was XX mm. The mean distance of its inferior border from the sinus floor was XX mm. The statistical comparison of the distance from PSAA to the sinus floor shows (no) significant difference between the gender & age groups.

**Conclusion:** When doing sinus elevation surgery using lateral approach, caution is needed at this region to avoid any potential vascular damage. CBCT scan is a valuable method in evaluating presence of sinus arteries before maxillary sinus surgery.