

Abstract

Introduction: Awareness of anatomic maxillary sinus variations for dental surgeons is so important specially for implant placement or maxillary sinus lift surgery. This study is conducted to Evaluate prevalence, location and morphology of the maxillary sinus septa in Cone Beam Computed Tomography images in Ardabil in 1399.

Methods and material: A retrospective review of CBCT images was conducted on 339 patients over 18 years old. Then prevalence, location and morphology of the maxillary sinus septa were evaluated and classified to three 113 patient groups according to dental system. 1) bio lateral posterior edentulous system. 2) bio lateral posterior partial system. 3) bio lateral posterior complete dental system. Also, septa were seen in 3 different regions, anterior, middle, posterior with chi-squared test and software spss22 and statistical significance was set at $p < 0.05$.

Results: The prevalence of maxillary sinus septa was 33/9% mostly in mediolateral position (84/3) and right side (58/3) moreover 23/2% was in complete system. There was no significant difference in location and morphology of septa according to dental system and age. ($p > 0/05$) but the prevalence was more in men than women. On that side there was no significant difference in location and morphology according to sex. ($p > 0/05$)

Conclusion: Sinus septa were mostly in the middle region but no significant difference was in 3 dental groups. The prevalence of septa was more in men so CBCT images for sinus lift surgery can be useful.

Keywords: maxillary sinus, septa, Cone Beam Computed Tomography