

## Cone Beam Computed Tomographic Study of Mucosal Thickness of Maxillary Sinus Floor

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The purpose of the present study was to determine the mucosal thickness of the maxillary sinus floor. The study included the 3D-cone beam computed tomograms of 53 patients (32 women and 21 men; aged 18-72 years, mean 46,3±13,4). The mucosal thickness was measured on cross-sectional images in its thickest part above the apexes of the molars and premolars, or in the absence of such– above the corresponding position of future dental implants. The average thickness measured was 2,24±3,11 mm, with mucosal thickening in 92,5% of all patients and above 56,3% of all teeth. A significant association was found between the thickness and pathological processes ( $p=0,002$ ). Highest percentage of changes occurred in the age over 26 years and there is significant association between the thickness and patient's age ( $p<0,001$ ). Pathology related to the lateral maxillary teeth and maxillary sinus is one of the main factors for mucosal thickening. The preoperative evaluation of the sinus mucosa is essential for the correct planning and prevention of complications in dental implant treatment and maxillary sinus elevation surgery.

*Key words:* mucosa, maxillary sinus floor, 3D- cone beam computed tomography, maxillary sinus floor elevation