

Pre-Surgical Implant Planning at First Maxillary Molar Region using Conventional Tomography, Reformatted Cross-Sectional, True Coronal, and Modified Coronal Spiral Computed Tomography. Egyptian Dental Journal, 50 (4):1855-1868, October, 2004.

Abstract:

Accurate estimation of bone height and width of the intended implant site is highly important to obtain reference measurements that can be used during surgery. It determines the depth and width necessary for surgical drilling, and also the bone height that has to be surgically reduced until a level is reached where the bone width is sufficient for implant placement. Fifteen patients undergoing pre-implant radiographic assessment of maxillary first molar ridge area in relation to the floor of the maxillary antrum. They were being the subject of this study. Conventional cross-sectional tomography; reformatted cross-sectional spiral CT scanning; modified coronal CT images and true coronal CT images were being performed to all patients. No statistical significant difference was observed between the 4 studied modalities in both bone height and width except there was statistical significant difference between true coronal CT bone width measurements and the other three imaging modalities.