MENTAL FORAMEN POSITION
A CLINICAL AND RADIOGRAPHIC STUDY
(Using human cadavers and two different Panoramic machines)

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ABSTRACT:

Knowledge of the position of the mental foramen is essential for both diagnostic and clinical procedures .This study was designed to establish the diagnostic reliability of two different panoramic machines )Orthopantomograph 10, Siemens and Planmeca, Finland (to localize the precise position of the mental foramen compared to localization by dissection .A total of 34 mental foramens in human cadavers were studied .The actual measurements on the human cadavers were compared to the radiographic distances measured on the panoramic radiographs .

The mean radiographic distances were less than those measured on human cadavers on both right and left sides .A significant difference was found between the actual measurements and that produced by Siemens on both right and left sides )p = 0.002 and 0.008(, While there was a significant difference between the actual measurements and that produced by Planmeca on the left side only )p =0.031 .( However, no significant difference was found between both OPG machines )p =0.069 and 0.0062 .(Our result revealed an average of a minimum of 2mm difference between the actual and the radiographic positions of the mental foramen .This difference in measurement should be considered during clinical judgement .Also, in this study the mental foramen appeared more consistent on the Planmeca than on Siemens machine .