

Determination of the Position of Mental Foramen Using Dental Panoramic Radiography

W. Bandara*, K. Hettiarchchi, R. D. Jayasingha, N. S. Soysa

Department of Oral Medicine and Periodontology, Faculty of Dental Sciences, University of Peradeniya

** wikumroshan@gmail.com*

The position of the mental foramen demonstrates anatomical and ethnic variations. According to the published literature, it typically lies between the apices of the first and second premolars or below the apex of the second premolar. Therefore, the present study was carried out to see the feasibility of using dental panoramic radiographs to reliably assess the position of mental foramen (MF) in a group of Sri Lankan population. The ethical approval for the study was obtained from the Ethics committee of the Faculty of Dental Sciences, University of Peradeniya. The position of the MF was recorded in 605 dental panoramic radiographs using an established crown and apex score. Data were analyzed using SPSS version 22. The data of the present study show that the position of the MF was between the first and second premolar teeth when using both premolar crowns (52.1% and 52.6% on right and left side, respectively) and apices (49.9%) as reference points. The MF position was symmetrical in 85.12% for crown scores and in 82.97% for apex scores. With regard to sex, the most frequent position was between the first and second premolar teeth for both males and females, and there was no significant difference between sex. According to the present study the most common position for the MF is between the first and second premolar teeth similar to the studies done in other countries. This is the first study carried out to show the position of MF in relation to premolar crown and apex using dental panoramic radiographs in Sri Lanka.