

3rd Euro Congress and Expo on

Dental & Oral Health

June 16-18, 2015 Alicante, Spain

The position of mental foramen in relation to mandibular premolars and molars on panoramic radiograph in south indian population-a hospital based study

Akhilanand Chaurasia
King George's Medical University, India

Objective: The purpose of this study was to assess the location of mental foramen in relation to mandibular premolars and molars, variations in the types of the mental foramen in dentulous, partially edentulous and edentulous patients and to determine age and sex related variations in the types of the mental foramen on panoramic radiograph. This study provides an insights in assessment of the extent of mental foramen to help clinicians prior to orthognathic surgeries, placement of mandibular implants and construction of artificial dentures.

Study Design: The panoramic radiographs of 560 subjects were evaluated. In 60 subjects mental foramina could not be identified on the panoramic radiographs so they were not included for statistical analysis. The study population included subjects of all age groups. The maximum subjects were in 20-29 years age group followed by 30-39 years and 40-49 years age groups. The data were analyzed using one way ANOVA (Analysis of variance), Duncan's Multiple Range test , Posthoc analysis of ANOVA and T-test.

Results: The present study confirms that most common location of mental foramen was in line with second premolar (36.8%) followed by between first and second premolar (29.4%), between second premolar and first molar (25.4%), in line with first molar (4.2%), in line with first premolar (3.8%) and anterior to first premolar (0.4%). The most common type of mental foramen was separate type (54.4%) followed by continuous type (30.4%) and diffuse type (15.2%). The separate type mental foramina were most common in edentulous group while continuous and diffuse type mental foramina were most common in dentulous group.

The distribution of all 3 types of mental foramina in all age groups were significantly associated with age (p value<.05, p value<.01). The distribution of all 3 types of mental foramina was not significantly (p value > 0.05) associated with gender of subjects.

Conclusion: The location of mental foramen in horizontal plane shows some ethnic and racial variations. The location of the mental foramen shown in our study corresponds to what have been documented in most previous studies. However further studies are required to know most common position of mental foramen in other ethnic and racial groups in India and World.

chaurasiaakhilanand49@gmail.com

Notes: