

TOOTH DIMENSIONS OF MAXILLARY INCISORS IN RELATION TO BODY HEIGHT, AGE AND SEX

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Odontometry has valuable contributions in establishing biologic differences between populations. The aim of the present study was to (i) establish the dimensions of maxillary incisors (ii) determine relationships of tooth dimensions to body height, age and sex.

The study sample consisted of permanent maxillary incisors (135) extracted from adult patients attending Hospital Dental Clinics in Kandy, and Peradeniya. Age, sex, race and height of the patient was recorded. The length of total tooth (TTL), crown (CL) and root (RL) were measured on the labial side using a Dental vernier caliper to the nearest 0.1 mm.

Mean TTL (mm) of males and females for the central incisor was 23.79 and 23.02, respectively. For the lateral incisor, they were 22.27 and 21.96, respectively. The mean RL (mm) of males and females for the central incisor was 13.39 and 12.72 and for the lateral incisor, they were 13.59 and 13.14, respectively. The ratio between CL/RL for the central and lateral incisors were 0.85 and 0.72, respectively. There was no significant difference in tooth dimensions between the two gender groups. A significant correlation was not observed between body height and any of the tooth dimensions. A positive correlation ($P = 0.01$) was found to exist between root length (RL) and age.

Although the sample size of the present study was too small to establish norms for the Sri Lankan population, we were able to obtain tooth dimensions of maxillary incisors. The absence of a significant correlation between any of the tooth dimensions and body height indicates that tooth length is not a good parameter to determine body height. The positive correlation between root length and age denotes that with age, the root elongates due to the formation of cementum at the root apex.

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