

Reliability of Primary Tooth Morphometrics in Sex Determination

Shamama Sheereen

Maharaj Vinayak Global University, Jaipur, India

Shazima Sheereen

Manipal Academy of Higher Education, Mangalore, India

Ameena Sultana

Al- Badar Dental College and Hospital, Kalaburagi, India

Mohnish Zulfikar Manva

Vyas Dental College, Jodhpur, India

Abstract:

Background: Odontometric measurements of human dentition is a reliable tool in forensic odontology. The morphometry of permanent human teeth is well established in literature, however only few studies have been performed on primary teeth.

Aim: The present study aims to determine the morphometric analysis of primary teeth in Indian children of Gulbarga city

Material and Methods: The present in-vitro study was conducted on 258 sets of maxillary and mandibular diagnostic dental casts from Indian children of Gulbarga city. With a digital vernier calliper the measurements recorded are mesiodistal width (MD), crown-height (CO), labiolingual/ buccolingual width (LL/BL) and Intermolar width of all four primary molars. The data was statistically analyzed with SPSS version 21 using the unpaired "t" test.

Results: The mean linear dimension of primary molar teeth with respect to MD, CO, LL/BP, and Intermolar width was higher in males than in females. The LL/BP width of maxillary and mandibular molar showed a significant difference between the genders for 55,65,75, and 85 ($p < 0.05$).

Conclusion: Morphometric analysis of primary dentition in children showed significant sexual dimorphism.

Keywords:

Odontometrics, primary molar, sexual dimorphism, intermolar width, forensic odontology, morphometric analysis.