Establishment of sexual dimorphism in North Indian population by odontometric study of permanent maxillary canine

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Aim: To investigate whether sexual dimorphism can be established by odontometric study of permanent maxillary canine teeth as well as inter-canine width in north Indian population.

Study Design: The study was carried out at Department of Oral Pathology & Microbiology, King George's Medical University, Lucknow, India on students and patients reporting at OPD. Out of total 180 subjects examined 90 subjects were female and 90 were male. Impressions of the upper arch were made using alginate and casts poured in dental stone. The mesiodistal diameter of the crown of permanent maxillary canine both on right and left sides and inter-canine width were measured. From these measurements, maxillary canine index was calculated. The percentage of sexual dimorphism was assessed for all the parameters.

Results: In the present study, the mesiodistal diameter of maxillary canine for both right (p=0.001) and left side (p=0.005) was significantly higher among male subjects than females, Similar observation was found for inter-canine width too (p=0.0001). However, the maxillary canine index for right and left was almost similar (p>0.05) for both male and female subjects. The sexual dimorphism in right and left mesiodistal diameters of maxillary canine was 4.2% and 3.6%, respectively. For, inter-canine width it was maximum i.e. 13.7%. However, sexual dimorphism in right and left canine index showed negative values i.e. -2.1% and -0.9% respectively.

Conclusion: There was sexual dimorphism in mesiodistal diameter and inter-canine width of permanent maxillary canine teeth. Sexual dimorphism was more on right permanent maxillary canine teeth than left permanent maxillary canine.

Biography
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