

Canine index- a tool for determination of sex

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Background: Canines have been found to show sexual dimorphism between males and female. But, there is a conflict in literature showing variation in results among maxillary and mandibular canines, as to which predicts sexual dimorphism accurately.

Aim: This study was undertaken to assess the morphometric difference in gender determination among Chennai population and to calculate canine index to determine sexual dimorphism.

Materials & Methods: The mesiodistal width of maxillary and mandibular canines, intercanine distance of maxilla and mandible was recorded using digital vernier callipers in 75 males and 75 females. Canine index and sexual dimorphism was calculated using standardised equation. Data entered in

Windows excel sheet and data analysed using SPSS version 16 software. Student's t-test was used to compare the mean difference of all measurements between males and females

Results: The mesiodistal distal width of canines was more in females and a reverse sexual dimorphism was obtained. Maxillary left canine showed a greater dimorphism of 4.44 followed by maxillary right canine of value 4.17. Maxillary canine index showed 100% accurate prediction in female population while mandibular CI has 88% accurate prediction in male population.

Conclusion: Canines, though they show a difference between genders, it can be used only as supplement tool for gender determination as percentage of accuracy is <70%.

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