

Odontology Section – 2004

F14 Sexual Differences in Turkish Dentition

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After attending this presentation, attendees will understand sexual variation in dentition among the nations. This presentation will impact the forensic community and/or humanity by demonstrating the variation in dental sizes which do not depend only to the sexes but also to the population in the nations.

Sexual variation in the human skeleton and dentition has been of great concern for both odontologists and anthropologists. Variation in dental size gives clues not only about the behavior of a population but also differences between the sexes. This study deals with sexual differences in a 20-29-year-old Turkish sample. A total of 28 buccolingual (BL) and mesiodistal (MD) dimensions of upper and lower dentition (I1 through M2) from dental casts of 50 males and 50 females were analyzed using discriminant function statistics. The results indicated that 8 of the upper and 7 of the lower dimensions were significantly greater in males. Much of the differences are in the front teeth of both jaws. Using a stepwise function on both jaws, lower and upper canine BL, lower canine and P1 MD, lower I2 BL were selected as the most discriminating variables. When only the front teeth are used in separate functions, only canine BL and of the lower jaw I2 and C BL of the upper jaw were found the most discriminating variables. Classification accuracy was 81% for the total sample and 76% for upper front and 81% for lower front teeth.

In conclusion dental dimensions in Turks are not very sexually dimorphic. Results found here is not considerably different from other Turkish studies. Anterior teeth seem to be the choice one should make in determining the sex. The present dentition should be compared with the skeletons in order to verify if the variation in dimorphism is small in the entire population of the country or it is only the dentition that is unique to Turks in this respect.

Forensic Odontology, Sex Determination, Dental Sizes