

A Comparative Study to Evaluate Chronological Age and Dental Age in the North Indian Population Using Cameriere's Method

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Abstract : Age estimation has importance in forensic dentistry. Dental age estimation has emerged as an alternative to skeletal age determination. The methods based on stages of tooth formation, as appreciated on radiographs, seem to be more appropriate in the assessment of age than those based on skeletal development. The study was done to evaluate dental age in the north Indian population using Cameriere's method. Aims/Objectives: The study was conducted to assess the dental age of North Indian children using Cameriere's method and to compare the chronological age and dental age for validation of the Cameriere's method in the north Indian population. A comparative study of 02-year duration on the OPG (using PLANMECA Promax 3D) data of 497 individuals with ages ranging from 5 to 15 years was done based on simple random technique ethical approval obtained from institutional ethical committee. The data was obtained based on inclusion and exclusion criteria and was analyzed by software for dental age estimation. Statistical analysis: The student's t-test was used to compare the morphological variables of males with those of females and to compare observed age with estimated age. The regression formula was also calculated. Results: Present study was a comparative study of 497 subjects with a distribution between males and females, with their dental age assessed by using a Panoramic radiograph, following the method described by Cameriere, which is widely accepted. Statistical analysis in our study indicated that gender does not have a significant influence on age estimation. ($R^2 = 0.787$). Conclusion: This infers that Cameriere's method can be effectively applied to the north Indian population.

Keywords : forensic, dental age, skeletal age, chronological age, Cameriere's method

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