

Dental age and skeletal maturity stages in patients with impacted versus erupted maxillary canines

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Objective: To compare skeletal maturity stages and mean dental ages in patients with impacted versus erupted maxillary canines through radiographs.

Materials and Methods: It was a case control study with a total number of 50 cases and 50 controls. The inclusion criteria were patients of chronologic age 13-16 years, cases with unerupted maxillary canines and controls with erupted maxillary canines. Dental age and skeletal maturity stages were recorded from pretreatment OPG and lateral cephalometric radiographs, respectively. To control the confounders, cases were matched with the controls on the basis of chronologic age, gender and vertical skeletal pattern.

Results: Independent sample t-test showed statistically significant difference ($p = 0.000$) between mean dental ages of cases (11.35 ± 0.47 years) and controls (13.17 ± 1.08 years). Chi-Square test also showed statistically significant difference ($p = 0.01$) of frequency distribution of skeletal maturity stages between cases and controls [CS1 (04%, 00%), CS2 (08%, 00%), CS3 (28%, 04%), CS4 (16%, 30%), CS5 (34%, 46%), CS6 (10%, 20%)], respectively.

Conclusions: Mean dental age was found to be significantly reduced in patients with impacted maxillary canines as compared to patients with erupted maxillary canines. Cervical vertebrae maturation was found to be significantly retarded in patients with impacted maxillary canines as compared to patients with erupted maxillary canines.

Biography

Sohaib Hassan received his BDS degree from Margalla Institute of Health Sciences, Rawalpindi, Pakistan in 2009 and awarded "Distinction" in Orthodontics by University of Health Sciences (UHS), Lahore, Pakistan. He has, on his credit, published 2 papers in reputed indexed journals and few are under review. He has presented his research work on various national and international forums. Currently, He is working as a chief resident in Orthodontics Residency Program at the Aga Khan University Hospital, Karachi, Pakistan.

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