Emergence and Agenesis of Third Molar and Its Relationship with Cephalo-Facial Measurements in Punjabi Girls

P. Singal, D.P. Bhatnagar and Amandeep Kaur

Department of Human Biology, Punjabi University, Patiala 147 002, Punjab, India

KEYWORDS Dentition. Eruption. Anthropometry

ABSTRACT The present study is based on a cross-sectional sample of 495 Punjabi girls ranging in age from 20 to 25 years. The subjects were drawn from various educational institutions of Faridkot and Patiala district of Punjab. The subjects were examined for the eruption of third molars. Four head and face measurements that is, head length, head breadth, bizygomatic and bigonial diameters were also taken on each subjects. The median age of eruption of third molars have been calculated through probit analysis. The mandibular third molars have shown early emergence that is, 21.89 years (right), 22.03 years (left) as compared to maxillary third molars that is, 24.16 years (right) and 23.17 years (left). The subjects in whom the third molar has erupted have larger head length, head breadth, bizygomatic and bigonial diameters. The absence of third molar in other subjects may be a step toward an evolutionary trend leading to reduction in cephalofacial diameters. It has been observed that even at the age of 25 years, third molar has not erupted in all the subjects. The absence of third molar in about thirty-seven percent subjects at this age may be as a consequence of the phylogenetic tendency towards delay of the onset of third molar formation as suggested earlier also