Letter to the Editor

European Journal of Orthodontics 34 (2012) 394–395
doi:10.1093/ejo/cjs017
Advance Access Publication 15 March 2012

Reply

Dear Sir

We thank Dr Halıcıoğlu for his interest and valuable comments regarding our paper 'Dental age in patients with impacted maxillary canines related to the position of the impacted teeth', we appreciate this opportunity to respond to his remarks.

We agree that dental development is a multifactorial phenomenon controlled both by genetic factors as well as

subjected to environmental influences. It is a most interesting and yet not fully explained issue. Vast material and continuous progress in this field of knowledge do not allow complete presentation of the subject in just one paper. We focused on a fraction of this problem, i.e. comparison of dental age estimated by Demirjian's radiological method in patients with canines impacted in palatal or buccal position versus control groups. We did not include patients with hypodontia in the own study in order to avoid the related bias as according to literature children with hypodontia show significant delay in dental development compared to children with full dentition. The papers dealing with the subject of dental age assessment, which were published after our research had been completed (Uysal *et al.*, 2009; Kan *et al.*, 2010; Celikoğlu *et al.*, 2011), are a stimulus for further multidirectional considerations, e.g. on sagittal and transversal skeletal patterns of the subjects in the material.

Frucht *et al.* (2000) underline that cross-sectional studies on assessment of dental age on large samples are difficult to organize as some individuals are excluded or fall out during long intervals between follow-up visits. Moreover, radiological protection is crucial in children and this implicates use of panoramic radiographs taken due to clinical indications and not solely for the purpose of the study. All the subjects in our study were undergoing orthodontic follow-up or treatment, i.e. they were not selected at random, so that the group might not represent the general population. For epidemiological purposes, the studied group should be larger, but this is a weak point of all studies on dental age estimation.

Ingrid Różyło-Kalinowska*, Anna Kolasa-Rączka* and Paweł Kalinowski**

**Departament of Dental and Maxillofacial Radiology and **Independent Unit of Epidemiology, Medical University of Lublin, Poland*

References

Celikoğlu M, Erdem A, Dane A, Demirci T 2011 Dental age assessment in orthodontic patients with and without skeletal malocclusions. Orthodontics and Craniofacial Research 14: 58–62

Frucht S, Schnegelsberg Ch, Schulte-Monting J, Rose E, Jonas I 2000 Dental age in Southwest Germany—a radiographic study. The Journal of Orofacial Orthopedics 61: 318–329

Kan W Y, Seow W K, Holcombe T 2010 A case-control study of dental development in hypodontic and hyperdontic children. Pediatric Dentistry 32: 127–133

Uysal T, Yağcı A, Ramoglu S I 2009 Dental maturation in patients with unilateral posterior crossbite. World Journal of Orthodontics 10: 383–388