

Letter to the Editor

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Dental age in patients with impacted maxillary canines related to the position of the impacted teeth

Sir,

I read with great interest the article on dental age in patients with impacted maxillary canines (Rozylo-Kalinowska *et al.* 2011). The authors investigated to determine whether there are differences in dental age according to Demirjian's method in patients with impacted buccal or palatal maxillary canines compared with unaffected controls. I would like to congratulate the authors for their effort in the preparation of the article.

After carefully reading this interesting study, I wanted to share a few points with *European Journal of Orthodontics* readers. Firstly, as stated in the literature, dental development is a multifactorial phenomenon. Therefore, all these factors should be considered when planning study about dental development. In the present study, subjects with hypodontia were not included. Similarly, Uslenghi *et al.* (2006) showed that children with hypodontia showed a significant delay in dental development compared to normal children. Thus, this is important and correct detail in terms of selection of this study material.

The authors stated that 'Dental age was significantly reduced in patients with impacted maxillary canines than in healthy controls.' Nevertheless, some other factors that were not discussed in this study might affect their dental developments. For example, Celikoglu *et al.* (2011) showed that the dental ages of patients with sagittal skeletal malocclusions were approximately twice as advanced when compared with patients without sagittal skeletal anomaly patterns. Furthermore, Uysal *et al.* (2009) reported that patients with crossbite had a tendency for delayed dental development compared with the control group without crossbite. Therefore, those factors that might affect dental development should be discussed. Also, in the discussion

section, authors reported that 'although none of the patients in the control group had maxillary canine impaction, both the study and the control groups were drawn from the sub-population of children requiring orthodontic assessment; therefore, the two groups were statistically appropriate for comparison'. Furthermore, did the authors evaluate the sagittal and transversal skeletal patterns of the subjects in the study? If they did not, as seen in this article, readers might consider this situation while reading the article.

Secondly, I would like to ask a question about the statistical methods used. Did the authors perform a sample size calculation when planning the study? Since the authors did not give this information, the reader does not know whether these findings are statistically correct and sufficiently powered.

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