Letters From Our Readers

To: Editor, *The Angle Orthodontist*

Re: Root resorption diagnosed with cone beam computed tomography after 6 months of orthodontic treatment with fixed appliance and the relation to risk factors. *Angle Orthod*. 2012;82: 196–201). By Dimitrios Makedonas, Henrik Lund, Kerstin Grondahl, Ken Hansen.

I read the important article published by Dimitrios Makedonas et al. with great interest. Congratulations on the authors' research achievements. It gives me a deep impression, especially the relationship between first phase of the orthodontic treatment and root resorption. It shows that the radiographic examination of 96% patients does not reveal the clinical significance of root resorption. But I have found myself puzzled by the following four questions. I hope the authors could give me some enlightenment.

1. The orthodontic treatment of the first stage is to align teeth. At this stage, compared with the molar, the incisor moves relatively more. So the prominent root resorption happens in the anterior teeth. The literature shows that there is a significant relationship between the small absorption of the early stage and the large absorption of the latter stage during the treatment. It is similar to the author's finding that the main root resorption happens in anterior teeth especially in the maxillary anterior teeth. But the author comes to the conclusion that the tooth movement does not have any impact on the amount of resorption after 6 months of active treatment. It confuses me.
2. The author draws a conclusion that the selected risk factors do not have any impact on the amount of resorption after 6 months of active treatment. However, there is no content referred to the relationship between the tooth movement and the root resorption. Table 1 merely shows the other factors. How the authors drew the conclusion confuses me.
3. The authors mention that rectangular 0.019 3 0.021-inch stainless steel wires are used in the space closure stage. Then the selected patient should use the same arch wires after six months of treatment. However, not all the selected patients could use the stainless steel wires after six months of treatment. In this case, the research will inevitably produce some bias.
4. In the end, the author did not explain how to decide how many samples are enough. We all know that there are 171 participants in the study, then why is 97 not 98? Why not include more samples to reach a more convincing conclusion?

However, this study is innovative, interesting and important. I hope the authors can get me out of the confusion from the above situations. I am sure your suggestion will benefit the researcher on the similar study in the future.

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