

Letters From Our Readers

To: Editor, *The Angle Orthodontist*.

Re: Salivary leptin levels in normal weight and overweight individuals and their correlation with orthodontic tooth movement. Tamizhmani Jayachandran, Bhadrinath Srinivasan, Sridevi Padmanabhan. *The Angle Orthodontist*. 2017; 87: 739-744.

Thank you for publishing this interesting study evaluating salivary leptin levels in normal weight and overweight female individuals and its correlation with orthodontic tooth movement (canine retraction).

Evaluating salivary leptin levels is a new area of research in orthodontics. However, salivary leptin concentration is derived mostly from the salivary gland and only partly from gingival crevicular fluid (GCF).^{1,2} It is highly correlated to plasma leptin levels which may not be as closely related to orthodontic tooth movement. GCF leptin level, on the other hand, is more likely to be directly correlated to PDL-alveolar bone changes during tooth movement. Can you comment further on the relationship among leptin levels in saliva, GCF and plasma, and why you chose to evaluate salivary levels in your study?

The text states that 0.014" NiTi wire was placed and retraction force was applied to the canine using active lacebacks. Were any other wire changes made during the 3 month assessment period? Also, when measuring the distance between the canine and second premolar to calculate canine movement, did you account for possible mesial movement of the posterior teeth? Couldn't there have been changes in the

alignment of the teeth during this time that may have affected the distances measured?

In the Methods section, it said that "Salivary samples were collected just before orthodontic force application (T0) and 1 hour (T1) and 1 month (T2) after force application." Specifically, it would be important to know whether the T0 salivary samples were taken before or after the initial wires were placed since any force on the teeth may have affected the leptin concentrations. Can you please comment on this?

Thank you for conducting this important investigation that raised interesting questions to discuss and suggests new research areas to explore.

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2. Saloom HF, Papageorgiou SN, Carpenter GH, Cobourne MT. Impact of obesity on orthodontic tooth movement in adolescents: a prospective clinical cohort study. *J Dent Res*. 2017; 96:547–554.