

Letters From Our Readers

To: Editor, *The Angle Orthodontist*

Re: Response to: Vibratory stimulation increases interleukin-1 beta secretion during orthodontic tooth movement. Chidchanok Leethanakul; Sumit Suamphan; Suwanna Jitpukdeebodintr; Udom Thongudomporn; Chairat Charoemratrote. *The Angle Orthodontist*. 2015, Online Early.

Thank you very much for your interesting comments and questions on our study.

Regarding the force-loading technique, we used elastic chain because it is considered to be the routine means of canine retraction. We set the experimental situation as close to everyday practice as possible, so that the results of our study can be easily understood and applied by readers. We were aware of the force degradation behavior of the chains, as a result, each chain was pre-stretched to twice its original length for 10 seconds to activate force degradation effect prior to the application. Forces were calibrated to 60 grams using a force gauge. The length of elastic chains therefore varied according to the distance between the canine and the molars. We do agree with Dr. Yan Yang that a NiTi coil spring may exert more consistent forces. Nevertheless, due to its wavy surface, the spring accumulates plaque easier than elastomeric chain

which may cause gingival inflammation. Moreover, the spring may irritate the gingiva if slipped gingivally.

Regarding the IL-1 β , we realized that the level of this substance is sensitive to the other kinds of inflammation, such as, periodontitis and gingival inflammation. Therefore, we were cautious about subject selection and experimental procedure. We recruited only samples patients who had healthy periodontal status. We carefully monitored plaque index and gingival index of each subject each visit. Patients who developed marked gingival inflammation during the study were excluded. Prior to GCF collection, we removed all visible plaque around the collecting areas. Also, we instructed the subjects to place the brush right on the bracket, not the tooth surface nor the gingiva.

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