

our study, subjects with a history of trauma to the dentofacial region, skeletal asymmetry, and general diseases were excluded. Therefore, it should be acceptable to use ANB angle.

In our study, the bone density of the condyle was measured with the use of CBCT, which is a common diagnostic tool in the dental field. The purpose of the study was to confirm the density pattern of condyle relative to skeletal pattern. Although CBCT is not appropriate for obtaining the absolute value of bone density, it is a good tool for differentiating between individuals with different skeletal patterns by measuring relative values. It might be interesting to use CBCT as a diagnostic tool for measuring bone density in future studies.⁴

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Survival rate of two orthodontic bonded retainer wires

We read the article "Clinical effectiveness of two orthodontic retainer wires on mandibular arch retention" (Gunay F, Oz A. *Am J Orthod Dentofacial Orthop* 2018; 153:232-8) with great interest. We congratulate the authors for conducting a robust study with an effective study design on this important topic. However, we

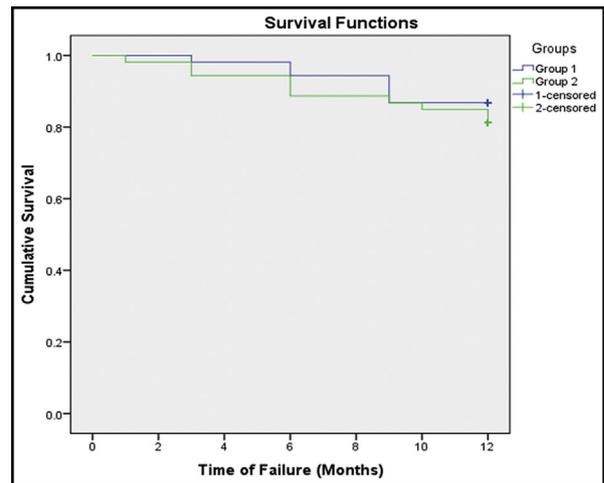


Fig. Kaplan-Meier survival curves for group 1 (0.0175-inch 6-stranded stainless steel retainer wire) and group 2 (0.0195-inch dead-soft coaxial retainer wire).

would seek certain clarifications from the authors on several points:

1. In paragraph 1 of the statistical analysis section, the authors mention that lingual retainer survival rates over 12 months were evaluated by means of the Kaplan-Meier test and that differences in retainer survival curves by retainer wire type were evaluated by means of the log-rank test. In Fig 3, the authors draw a Kaplan-Meier curve depicting the cumulative survival rates of group 1 (0.0175-inch 6-stranded stainless steel retainer wire) and group 2 0.0195-inch dead-soft coaxial retainer wire), but the graph touches zero percent in both groups over a 12-month follow-up period. This means that survival or success of the bonded retainer is 0% at the end of 12 months in both groups, although it is 86.8% in group 1 and 81.1% in group 2 according to Table II (log-rank test: $\chi^2 = 0.661$; $P = 0.416$). Figure 3 and Table II completely contradict each other. We think that the graph should be drawn as shown in Figure (Corrected).^{1,2}
2. The authors applied repeated-measures analysis of variance (ANOVA) for irregularity measurements and intercanine distance. Intragroup comparison at different time points is mentioned, but what is the intergroup difference at different time points of the above parameters? In Tables IV and V, 2 different F-values are mentioned, and it seems that the authors have applied 1-way repeated-measures ANOVA separately for each treatment group and not repeated-measures ANOVA for

- both groups together. Our question is why intergroup repeated-measures ANOVA² was not applied.
- Intergroup comparison (Table VI) of mean irregularity measurement (mm) difference between post-treatment and 12-month retention period (T5-T1) via Mann-Whitney test gives us vital information that mandibular arch irregularity is significantly higher in group 2 than in group 1. Similarly, it would also be pertinent to know the results of a Mann-Whitney test for the difference in mean intercanine distance between the 2 groups. This result may help us in localizing the irregularity site so that adequate stress can be given to the areas requiring maximum retention. The authors should comment on why this relevant information was not shared.

We emphasize that by no means are we disregarding the efforts of the authors in conducting this trial, but our intention is that correct and relevant information should reach the readers of this journal.

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Author's response

Thank you so much for your interest and the valuable contributions you have made to our work.

- Only the failure times were considered when creating the cumulative survival chart. The data of the no-failure retainers were inadvertently filtered. When the filter was removed for the no-failure retainers in the follow-up periods, the relevant survival graph was recreated with the previously censored data, and the correction was mentioned (Fig). Thank you for giving us the opportunity to make this correction.

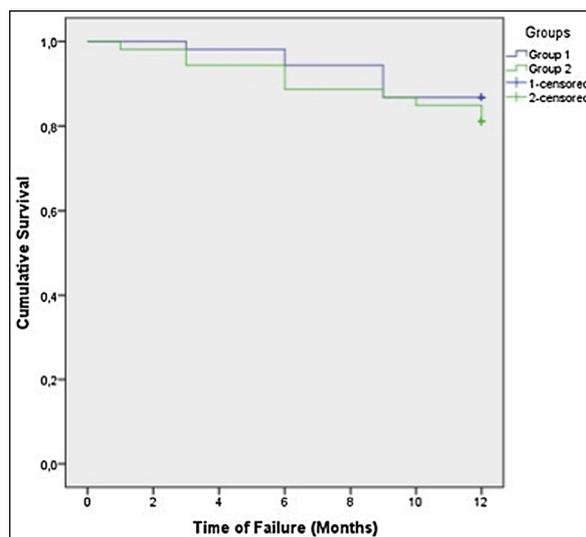


Fig. Correction of the figure. Lingual retainer survival rate according to wire type.

- Repeated-measures analysis of variance was performed separately for each group. When the group variable was accepted as the factor and analyzed, time and group interaction was obtained. In this case, the measurements of each group at different times would be compared with the measurements of the other group at different times, and the results would go to a different and complex point. However, the main purpose of our study was to examine the temporal change in each group. We aimed to examine whether the temporal changes of each group were statistically significant. Therefore, each group was analyzed by repeated-measures analysis of variance. In this study, the irregularity change from the post-treatment period to the 12-month follow-up (T5-T1) was also calculated for each variable, and a comparison of the groups was made with these data.
- As we know, previous studies have reported that intercanine width that has been altered by orthodontic treatment tends to return to its initial size, which affects the long-term stability of orthodontic treatment. Therefore, in most cases, the lower intercanine width should not be increased during treatment. We are careful to preserve the intercanine distance and arch form at the beginning of the treatment in all of our treated patients, including those in this study. Treatment with extraction or without extraction can make a difference between the groups' arc widths at the end of treatment. As we stated in the article, we also took care to include