

Mandibular incisor alignment over the long term

I read the article entitled “Mandibular incisor alignment in untreated subjects compared with long-term changes after orthodontic treatment with or without retainers” by Ulrike Schütz-Fransson, Rune Lindsten, Kristin Bjerklin, and Lars Bondemark in the February 2019 issue (*Am J Orthod Dentofacial Orthop* 2019;155:234-42). The authors concluded that there is a need of life-long retention for mandibular incisors, and there is no difference between using retainers for a certain period (mean 2.7 ± 1.5 years) and not using them at all for mandibular incisors.

The authors had 3 groups in the study. One used retainers on the mandibular incisors after treatment (64 participants); the second did not use retainers on mandibular incisors after treatment (41 participants); and the third was an untreated group (25 participants). The authors mentioned that the decision to leave orthodontically treated patients without retention on the mandibular incisors was made by the orthodontists who treated the patients in the second group. The orthodontic treatments were performed at the Department of Orthodontics, Institute for Postgraduate Dental Education, Jönköping, Sweden, from 1980 to 1995. I sincerely appreciate the orthodontist who treated the participants of this research, who followed most of the guidelines that prevent relapse.

In any orthodontic center, whether it is an institute or a private practice, it is mandatory that after treating a patient with malocclusion with the use of an orthodontic appliance, some kind of retention appliance has to be given except in very few malocclusions such as anterior crossbite or midline diastema after an “ugly duckling” stage. In this study, the participants were treated at an orthodontics institute where it is expected to follow the orthodontic guidelines strictly. How was it possible for the authors to get a sample of 25 patients who are orthodontically treated and left without retention? Is it ethical to treat malocclusion with the use of orthodontic appliances and still leave the patient without retention on the mandibular incisors? Is there any reference in the literature that an orthodontically treated malocclusion can be left without retention on mandibular incisors? The authors should elaborate on this aspect because it is one of the important aspects regarding the research.

The third group consisted of 25 untreated subjects who were age-matched with the other 2 groups. The authors mentioned that these participants were followed because of infraocclusion of primary molars with

permanent successors or the reversible type of ectopic eruption of maxillary first permanent molars. The authors themselves mentioned that the postponement of a needed orthodontic intervention for 12 years is ethically unacceptable. If that is the case, how did this happen in the institute where there is teaching and learning every day?

*Santosh Kumar Goje
Vadodara, Gujarat, India*

Am J Orthod Dentofacial Orthop 2019;156:3
0889-5406/\$36.00

© 2019 by the American Association of Orthodontists. All rights reserved.
<http://dx.doi.org/10.1016/j.ajodo.2019.04.011>

Authors' response

Thank you for your interest in our article. The first question is how we could have had several orthodontically treated patients with no retention wires in the mandible, and if this was ethical, as well as if there are any references in the literature about this.

Some 35 years ago, a supervising orthodontist at the Orthodontics Department in Jönköping was of the opinion that retention wires for the mandibular incisors for some years offered only a temporary retention. His opinion was that on follow-up a number of years later, the effects of the wires had vanished, ie, there was relapse. If you want to retain the lower incisors, the retention must be life-long, with all the risks of negative side-effects.

Today we can state that the orthodontist was right. Sometimes, it can be useful and important that there are persons who dare to challenge established routines and dogmas, and it is precisely these persons who are in the forefront of research and knowledge. Because a cohort with follow-up existed where the patients did not receive any retention for mandibular incisors, it would be unethical not to use this material for research purposes.

There is no reference in the literature on this with long-term follow-up. Our study is the first.

The second question is how we could have a control group of untreated subjects.

We wrote in the Discussion: “Ideally, the study should have included an untreated group of subjects with malocclusions like those of the treated groups. However, the postponement of a needed orthodontic intervention for 12 years is ethically unacceptable.” Therefore, we used as control subjects untreated individuals with only minor malocclusions, who had follow-up registrations, and who had been reported in 2 previous doctoral dissertations. The sentence quoted by the writer, “the