

Pediatric Clear Aligner, I Can Do it Too!!!

(Various Clinical Cases of Pediatric Clear Aligner Orthodontic Treatment : How and to What Extent is it Possible?)

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Conventional pediatric orthodontic treatment was focused only on expansion of a compressed arch as a method of resolving crowding and tooth alignment.

But

- 1) Expansion of the arch to form a normal arch width and posterior occlusion
- 2) Alignment of anterior teeth and form a normal overjet/overbite
- 3) Correction of transverse, sagittal and vertical discrepancy
- 4) Breaking bad habits that causes malocclusion

with these 4-key-points, the improper breathing and swallowing method and the abnormal growth of the musculoskeletal system around the oral cavity can be led to a more harmonious state. The changes can also let the oral environment to be in a state that can lead a normal growth. With this advanced and detailed pediatric orthodontic treatment, even if the current tooth alignment, facial and skeleton features of a child are not ideal, it will change not only beautiful smile and face, but also personality and overall life.

Pediatric orthodontics, which started in the early mixed dentition period, requires thorough management such as detailed space supervision, perfect wearing of retainers and using muscle functional devices for a long retention period after the completion of the early orthodontic treatment. Many severe malocclusion cases were frequently addressed and corrected by a result of these pertinacious management until all permanent teeth erupted, posterior occlusion and growth of the maxilla and mandible was completed. As these amazing experiences were repeated, I was strongly convinced that it was not a coincidence but it was a solution to many problems and could harmonize with the natural resilience and healing power of the human body through early intervention.

“Not see the forest for the trees”

After practicing pediatric orthodontics for a long time, I came to a thought that it is the best describing proverb for pediatric orthodontics. Pediatric orthodontics should focus more on the overall facial and skeletal feature of patients rather than tooth alignment and space regaining. However, it was not easy practicing pediatric orthodontics due to such reasons: children's non-cooperation, guardians' ignorance and indifference, long maintenance period, and low profitability. There were also several difficulties and limitations on using removable devices, orthopedic appliances, and orthodontic wires and brackets to child. Nevertheless, I couldn't give up practicing pediatric orthodontics because it had numerous advantages. In order to find a solution to these difficulties, I started to perform pediatric orthodontic treatment using a 'clear aligner' with a dental lab in 2016.

In 2019, digital clear orthodontic treatment system using oral scanners and clear aligners,

which were only applicable to adults, was also applied to children. I started to perform pediatric orthodontic treatment using this system for the first time in Korea and 280 cases were treated so far.

In this lecture, I will report how much malocclusion can be treated using pediatric clear aligners through case presentation. I hope this lecture is an opportunity for you to take an interest in pediatric clear orthodontic treatment and start it.

Profile

- * Pediatric Dentistry, Kyung Hee University School of Dentistry, completed internship and residency
- * Korean Academy of Pediatric Dentistry (KAPD) Director, External Cooperation
- * KJCD (Dentistry) Pediatric Dentistry Part Writer
- * Invisalign BLACK Diamond Tier User
- * Invisalign Official Speaker
- * Yongin Junior Dental Representative Director