

Adult treatment with Aevo System™ and Invisalign® clear aligners

Class I, moderate crowding, relapse



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Dr. Kelly Brooke is a board-certified orthodontist. He graduated from the University of Manitoba with a Master of Science Degree in Oral Biology and certificate in Orthodontics and Dentofacial Orthopaedics. Dr. Brooke practices as an orthodontist in Brooke Orthodontics in Calgary, Alberta, Canada.

Patient:

Age: 29 years

Chief concern: Correct tooth alignment and lower left lingual tooth angulation. Correct relapse from previous orthodontic treatment.

Diagnosis:

- Class I malocclusion
- Previous orthodontic treatment relapse
- Mild crowding
- Minimal overbite
- Retro-clination of anterior teeth in quadrant #3

Initial Records:



Treatment Plan :

- Clear aligner treatment with the Aevo System™.
- Increase overbite.
- Correct midlines.
- Correct third order torque of anterior teeth in quadrant #3.
- Incisal adjustment tooth 11 to match 21.
- Aligner change intervals 3-4 days with the Aevo System™.

Clincheck set up and staging:



Treatment results:

- 5 months from initial records to retention, 14 + 14 upper and lower aligners.
- Estimated treatment time was 6 months, without using the Aevo System™
- 3 months and 1 week of active treatment with the Aevo System™ and Invisalign®.
- Patient changed aligners at 3–4 day intervals with the addition of the Aevo System™.



Clinical discussion:

Invisalign clear aligners are ideal for adult orthodontic re-treatment to correct relapse. In this case, the patient had a unique retro-clination of her anterior teeth in quadrant #3. Such positioning of these teeth was surmised to be from additional extra-oral force placed upon this region from use of a scuba diving snorkel; wherein, her occupation was a scuba diving instructor.

This case was successfully treated in 3 months and 1 week (active treatment) with clear aligners and LIPUS (low intensity pulsed ultrasound) from the Aevo System™.

The patient wore her aligners 3-4 days each, with an interim latent period of ten days between her initial and refinement phases, for aligner manufacturing.

Retention included a maxillary removable Essix and a mandibular fixed bonded lingual retainer(s). Conservative incisal reduction was performed on tooth 11 to enhance her esthetic outcome. Patient compliance was good, and teeth tracked very well.

The patient performed Aevo System™ treatment while wearing her aligners, as per the manufacturer recommendations.