Invaluable Support with a First Case

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A 58-year-old patient presented to the practice in March 2015 with concerns that her upper laterals were sticking out—something that had bothered her all her life. She was otherwise healthy with no previous medical issues or current medications.

A full dental assessment revealed a skeletal Class II division 2 malocclusion, as well as an overbite and a small overjet. The lower arch had minimal crowding which did not bother the patient. The upper right lateral had undergone endodontic treatment many years previously and it was now discoloured. Many large restorations were present in the molars, both composite and amalgam. Aside from minimal plaque and calculus, good oral hygiene was recorded. The upper anterior teeth showed a little mobility but no periodontal pockets were detected.

Treatment options

Many years ago the patient was referred to an orthodontist, but she did not desire fixed braces. Prosthodontic solutions were also discussed at the time, which would have included veneers on the upper centrals and laterals, resulting in loss of a lot of tooth substance on the laterals and an elective endodontic treatment on 22.

With this in mind, the IAS Inman Aligner method was suggested as an alternative option. X-rays and photographs were taken during that appointment to ascertain suitability and no pathology or abnormalities were identified. Both the upper and lower jaws were then scanned with CAD/CAM technology and the digital impressions sent to a certified lab.

The lab did the Spacewize™ calculations and it was confirmed that the case was suitable for treatment. A video demonstrating the predicted result was also provided, which made it easy for the patient to visualise the outcome and make an informed decision.

Upon her consent to proceed the treatment plan was discussed in detail, including frequency of appointments, importance of compliance, potential difficulties in the beginning, potential bleaching, changing restorations in the anterior teeth and need for a permanent retainer.

Treatment provision

In May, the IAS Inman Aligner was fitted. Inversion, removal and cleaning instructions were given and the patient was advised to wear the appliance for 20 hours per day. The aligner had an expansion screw and the patient was also instructed to turn the screw by a quarter of a circle every 3rd day, but no more than 12 times in total.

A composite anchor was placed on 11 palatally. IPR and PPR were also performed according to the lab instructions—distally on the centrals and mesially on the laterals. I was a little too careful at first so more IPR and PPR was needed along the way. Consequently appointments were made at two-week intervals.

Six weeks after treatment began, the upper centrals had moved buccally and the expansion screw no longer required turning. Tooth 11, which had the palatal composite anchor, had over-erupted a little. Following advice from the IAS online support, it reduced in size and moved as far onto the incisal edge as possible to minimise the extrusion force. A similar anchor was placed on 21 to spread the force across both teeth. Both incisors were very mobile at that point but the patient reported no pain.

Two weeks later composite anchors were placed buccally on 12 and 22 and a little more PPR was carried out on these teeth distally to encourage rotation. After another fortnight, the anchors were removed from the centrals and new ones were placed palatally on the laterals. At this point the laterals had both buccal and palatal anchors to increase rotation.

The IAS online support was once again consulted because not enough rotation of the laterals was being achieved. The IAS Inman Aligner was sent to the lab for a bow reset and the patient had an Essex retainer in the meantime.

The IAS Inman Aligner was then used for four more weeks, before treatment was concluded with two IAS Clear Aligners. Bleaching trays were also constructed and bleaching was carried out with Philips Zoom. Finally, the fillings were changed in the anterior teeth and composite restorations—distally on the centrals and new ones were placed palatally.

Outcome

The patient is very happy with the outcome achieved. The laterals have always bothered her but she was not ready to have fixed orthodontics. She was amazed this result was possible with the IAS Inman Aligner.

From my point of view, this was my first case and I found it very challenging. It was also not totally without complications—but thanks to patient compliance and fantastic help and feedback from the instructors through the online support, it went really well. I would, however, advise others to begin with an easier case and do not hesitate to contact the instructors through the online support with any questions!