Make Mine

Ask Dr. Feldman a question about these cases
Wondering how Dr. Blair Feldman was able to persuade his patients to accept treatment with traditional braces? Go to dentaltown.com/magazine and leave your question in the comments field for him to answer.
Have you ever noticed that among your orthodontic peers, they seemingly know how to do everything? I’m not talking about just tipping and torquing teeth—I mean everything.

I was recently at a local orthodontic meeting, eating breakfast before lectures began, and was impressed by the far-ranging subjects of conversations at the table. Topics included everything from woodworking, aviation and investments to home electronics and parenting. We aren’t just dabblers in these pursuits outside the oral cavity. In fact, I don’t think self-ligating brackets were even mentioned once.

**Orthodontists like to dig deep into specifics**

Orthodontists, in my experience, are the living embodiment of the phrase, “If you want something done right, do it yourself.” When we discover something interesting, we dive deep to learn everything about a subject. We subscribe to industry magazines and are all over the web—both learning and posting articles. We join organizations in these fields to learn, teach and lead.

To nonorthodontists, it may appear that the practice of orthodontics is so easy and guaranteed to produce wealth that orthodontists use these outside hobbies to stave off boredom. In my opinion, it’s not boredom that pushes orthodontists into such disparate hobbies—it’s our specialist nature.

As specialists in the field of dentistry, we’ve learned the intricacies and nuances of a specific subset of dental treatments. It becomes our internal neural programming to look at *anything* interesting and try to discover all the subtleties of a small subset.

Thus, those conversations at breakfast weren’t about “woodworking” but about turning wood on a lathe to create beautiful wooden bowls. They weren’t conversations about “planes,” but rather instrument approaches in a single-engine Turbo Cessna 182 into the airport in Van Nuys, California. Our specialist nature drives us to take what we learn and experience in our practice—both at the level of the teeth and listening to our patients’ needs and wants—and to develop improved treatment modalities.

In the competitive and quickly changing environment where my practice is, we’ve been watching forces in our field playing out. Patients’ demands for quicker treatment delivered during consumer hours, pitted against orthodontic services delivered by mail-order services, have created a confused market where consumers aren’t sure where any dollars reserved for a beautiful smile should be spent.
Adult orthodontic patients won't accept long treatment

One observation of change in our office is that our average patient age is increasing. Many of these older patients come in asking for some form of “clear” treatment. They don’t consider visible braces to be an acceptable option, and many patients come to the office specifically asking for Invisalign.

We spend a considerable amount of time in our new-patient consultations educating patients who are interested in clear aligners about their role in tooth movement. We let them know that Invisalign and ClearCorrect are just labs that make orthodontic appliances.

Similar to the way each orthodontist is able to utilize braces in his or her own way—variations in selected bracket type, bracket positions, early treatment, etc.—doctors who use clear aligners each do so differently as well. There are varied opinions about appropriate ages, the interval of changing aligners, appropriate case types and more. We let patients know that our goal is an ideal smile that meets all the lofty orthodontic criteria, and that we’ll use the tools we have (and the ones they want) to meet those criteria.

Many of our adult patients present with a common orthodontic problem. They present to the office seeking an improved smile—and they want treatment that is less visible. They frequently present with moderate to severe mandibular crowding, mild to moderate maxillary crowding and Class I or nearly Class I occlusion. These patients often report that they never needed braces, or that they had braces and wore retainers for only a few years afterward, and their teeth have gotten worse over the years.

Why clear aligners alone might not be the solution

The problem I found with using clear aligners alone for these adult patients was threefold:
1. It takes a considerable amount of time in clear aligners to relieve significant lower crowding and rotations.
2. Adult patients want to see rapid changes.
3. Adults do great wearing clear aligners for up to 12 months. Then compliance starts to drop.

For my patients with similar malocclusions being treated with braces, we made these observations:
1. Patients were excited about rapid improvements in crowding during the leveling and aligning phase.
2. Patients were enthusiastic during the initial months of orthodontic treatment using braces.

3. Patient enthusiasm and compliance with braces decreased dramatically during the later stages of treatment.

I realized that, as an orthodontic specialist with a variety of tools at hand, I should be recommending that we take advantage of the best aspects of each one: Treat with braces for a short time to level and align the lower teeth, then follow with clear aligners to detail the teeth and finish the occlusion.

Many of our adult patients have been completely leveled and aligned in their first two wires using braces, so we began promoting our combination treatment, which involves 4–5 months of braces on the lower teeth and Invisalign on the upper teeth, followed by full Invisalign treatment for the remainder of the treatment (usually 12 months).

Here are three examples of patients in which we’ve used our combination treatment to take advantage of the best aspects of each modality. The first two cases were switched from lower Invisalign to braces because the patients had poor compliance and expressed frustration with slow visible changes. The third case, meanwhile, was presented as a combo case from the onset.

**Patient 1:** Frustrated by fit, Bad at compliance

The first patient was a 44-year-old who began treatment as a full upper and lower clear-aligner case. (I had recommended partial braces for his treatment, but he explicitly declined during the consultation.) At later appointments it was noted that he had been inconsistent about wearing his aligners, so I asked him to describe his biggest obstacles to getting 20 hours of daily wear. He said that after a spurt of wearing the aligners frequently, he hoped and expected to see some visible changes. When there were no observable changes, he’d get frustrated and stop wearing them for a few days. With that wear schedule, the fit of his aligners would get worse, which caused him even more frustration.

I recommended that we boost his treatment by placing braces on only the lower teeth—the more complicated ones for aligners to improve because of the patient’s severe crowding and rotations. I promised that the braces would be on for only 4–5 months and then we could return to clear aligners and finish in a reduced amount of time.

We placed American Orthodontics Empower braces on the lower 7–7 with an 0.014 nickel titanium wire. The patient chose not to wear his upper aligners at all, saying that he would pick up usage again after we finished the lower arch.

The changes in the lower arch can be seen from his initial photo (Fig. 1) to the day we removed the lower braces (Fig. 2). We used three NiTi wires: 0.014, 0.018, and 20x20. The process took five appointments over the course of five months, including bonding, two emergency appointments to clip long wires, and removal of braces.

On the day we removed braces, we scanned for an Invisalign refinement and placed a lower 3–3 bonded retainer to hold the
teeth until the aligners arrived. Once the new aligners arrived we removed the lower 3–3, bonded any attachments and delivered the new aligners.

Fig. 3 shows the teeth on the day of the intraoral scan, while Fig. 4 shows the superimposition of the final desired movements on top of the initial scan (the blue teeth). Most of the changes occur in width to match the upper teeth, and it’s expected that the patient will only need 12 lower aligners.

**Patient 2:**

**Frustrated by slow results**

“I’m not going to wear braces and look like one of my kid’s friends,” said this 44-year-old woman. We began Invisalign treatment, and she did a great job of wearing her aligners 20 hours per day, but after four months, she became frustrated that the changes were occurring too slowly. She was estimated to have approximately 35 aligners to correct her initial lower crowding (Fig. 5).

Fig. 6 shows mild resolution of the crowding after four months of aligner therapy, and the day we placed lower braces from 6–6 and placed an 0.013 NiTi wire. We proceeded through four NiTi wires: 0.013, 0.014, 0.018, and 20x20. We saw the patient about every
four weeks, at her request, and removed the lower braces in four months. The positioning of her lower teeth on the day of the braces removal and scan for refinement are pictured in Fig. 7. The patient had five regular appointments and two emergency appointments for poking wires.

Her lower teeth (Figs. 8 and 9) show the superimposition after the 13 aligners estimated to correct the teeth position after braces. Most of the changes appear to be constricting the teeth to coordinate them with the upper arch.

**Patient 3:** 
**A combo case from the start**

For this 46-year-old male, we presented the only option of treatment as being lower braces and upper aligners for 4–5 months, followed by full-mouth aligner therapy. His initial crowding can be seen in Fig. 10. After five months of braces and two wires (0.013 and 0.014), we removed the braces, scanned for a refinement and placed a lower bonded 3–3 to hold the teeth until his aligners arrived. The position of the lower teeth on the day of the scan can be seen in Fig. 11.

**Discussion**

Using short-term braces to correct crowding and rotations and clear aligners to detail the teeth and occlusion can be an effective way to manage an adult patient’s care while continuing to motivate him or her throughout treatment.

Although this technique can be used reactively to treat poor compliance or difficult movements after clear aligner therapy has started, it’s more efficient when done proactively, as part of a comprehensive combination treatment method.

Promising 4–5 months of braces is usually an acceptable amount of time for adult patients who want the benefits of instant gratification and a clear treatment method. In fact, it has become an important and requested procedure in our office. We simply tell patients to say, “Make mine a combo.” ■