Case 2:  
Interdisciplinary adult treatment with clear aligners

A 45-year-old patient was referred by her prosthodontist to intrude teeth #2 and #3 before implant placement in the lower right quadrant. Patient declined treatment with fixed appliances and would only undergo treatment with clear aligners.

The teeth had overerupted owing to long-term partial edentulism in the lower arch. A significant advantage of using the MTI device in this case was the ability to place the TADs anteriorly in ideal thickness of palatal bone, yet extend the appliance distally to provide a stable and direct intrusive force to #2 and #3.

Another advantage was the ability to use unilateral mechanics and avoid cross-arch stabilization. No change in torque was prescribed, so to prevent transverse side effects, buccal TADs were placed. Intrusion of #2 and #3 was programmed into the clear aligners, and treatment progressed as planned. Treatment was completed in 11 months.

Sufficient interocclusal space was created to fabricate ideal implant crowns at the correct occlusal plane. Because the patient declined to wear fixed appliances, ideal uprighting of #18 and #32 was not achieved.

Fig. 2a: Pretreatment. Overeruption of #2 and #3 into the edentulous space in the lower arch.

Fig. 2b: Unilateral MTI appliance and buccal TADs. Buttons were bonded to the buccal and palatal surfaces of #2 and #3, and elastic chain was used for activation.

Fig. 2c: Final orthodontic result after 11 months of treatment.

Fig. 2d: Final interdisciplinary result with implants, and crowns on #30 and #31.