

Case 1:

Adult open bite, fixed appliances

A 51-year-old patient with a history of previous orthodontic treatment with extraction of four bicuspid presented for an orthodontic consultation to correct his bite.

Clinical examination noted narrow arches, an edge-to-edge anterior

occlusion, a bilateral posterior lateral open bite, an excessive buccal overjet and significant extrusion of the maxillary molar palatal cusps. Because of the significant need for posterior torque control, the ideal treatment plan involved intrusion of the maxillary molar palatal cusps using TADs and an MTI. The MTI initially was bonded to the canines, but the canine bonds were removed for the final settling of the occlusion.

Treatment with fixed appliances, the MTI appliance, and finishing elastics was completed in 19 months.



Fig. 1a: Pretreatment records



Fig. 1b: After initial alignment and decompensation of the dentition in the initial round wires, the transverse discrepancy and torque of the maxillary molars worsened. An MTI was fabricated to intrude the palatal cusps of the maxillary molars. The appliance allowed for an individual intrusive force to be applied to each molar.



Fig. 1c: Final photos. Treatment goals were achieved. Because of Class III tendency and Bolton discrepancy, a space was left between #10 and #11 for cosmetic bonding.

Continued on p. 44