

American Journal of Orthodontics & Dentofacial Orthopedics

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COVER

On the cover: Ideal treatment for an adult patient with skeletal anterior open bite might require orthodontics and orthognathic surgery. The procedures used by Park et al to treat a patient in Mesa, Arizona, were complex: a 3-piece LeFort I maxillary advancement osteotomy with differential impaction; expansion of the posterior segments; and down-fracture of the anterior segment to correct the open bite, transverse discrepancy, midface deficiency, occlusal cant, maxillary midline, and maxillary incisor display. A bilateral sagittal split osteotomy could also have been considered to correct the open bite, mandibular asymmetry, and midline. Computer-aided surgical simulation showed the expected segment orientation and positioning, and was helpful in evaluating possible bony interferences, grafting needs, and the best type of fixation to use. Virtual surgical planning provides preoperative insight into the expected dental and skeletal movements and osteotomy orientation, and the virtual plan can be accurately transferred into the surgery with the construction of a surgical splint. The smiling patient on the cover is Jackson Vanderpool. He was treated orthodontically by Drs Gregg and Daniel Frey of FreySmiles Orthodontics, Allentown, Pennsylvania.

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