

INCREASING ORTHODONTIC AND ORTHOGNATHIC SURGERY TREATMENT EFFICIENCY WITH A MODIFIED SURGERY-FIRST APPROACH

Uribe F, Agarwal S, Shafer D, Nanda R. *Am J Orthod Dentofacial Orthop* 2015;148:838-48.

SUMMARY

In this case report, Uribe et al. reviews how the total treatment time can be reduced with a modified surgery-first approach. A 33-year-old white man was diagnosed with skeletal Class III and dental Class II subdivision malocclusion caused by a retrognathic maxilla, maxillary and mandibular crowding, a highly placed maxillary left canine, and a bilateral posterior crossbite.

The authors detail a presurgical orthodontic protocol prior to surgery, which resulted in an enhancement of the efficiency during the orthodontic and orthognathic surgery phases of treatment. To expedite tooth movement prior to the surgical phase, the patient was prescribed the use of AcceleDent.

With AcceleDent, the authors specifically noted significant enhancement of the speed of canine retraction at approximately 1 mm/week, which is more than 3x the rate (1.19 mm/month) reported by Pavlin et al. of a similar canine movement in a separate AcceleDent randomized controlled trial.¹

As a result of the modified surgery-first approach, the patient completed treatment in 12 months with a fully functional occlusion and an attractive esthetic finish.

✓ KEY POINTS

- This peer-reviewed published case report illustrates how AcceleDent can be incorporated to expedite tooth movement to accelerate treatment in a combined orthodontic/orthognathic surgery protocol, which can last at least 2 years. This case was treated in 12 months.

¹Pavlin D et al. *Cyclic loading (vibration) accelerates tooth movement in orthodontic patients: A double-blind, randomized controlled trial. Seminars in Orthodontics, Volume 21, Issue 3, 187 – 194.*