Patient's perception of the facial appearance after maxillomandibular advancement for obstructive sleep apnea syndrome

Kasey K. Li, DDS, MD*, Robert W. Riley, DDS, MD†, Nelson B. Powell, MD‡, Christian Guilleminault, MD§

Abstract

**Purpose:** The goal of this study was to evaluate the patient's perception of the facial appearance after maxillomandibular advancement (MMA) surgery for obstructive sleep apnea syndrome (OSAS). **Patients and Methods:** During a 14-month period, 58 patients underwent MMA for OSAS. All of the patients underwent preoperative and postoperative cephalometric analysis. Between 6 and 12 months after surgery, a questionnaire was mailed to each patient. The questionnaire asked the patient to evaluate subjectively their postoperative facial appearance. Visual analog scale (0 to 10) was used to assess the extent of the facial changes. **Results:** Forty-four (76%) patients (39 men, 6 women) responded to the questionnaire. Cephalometric analysis revealed that 40 patients had maxillomandibular protrusion postoperatively. Forty-two (96%) of the 44 patients reported changes in their facial appearance (VAS, 4.8 ± 2.5). Twenty-four (55%) patients reported favorable facial changes (ie, they were more attractive [15 patients] and/or more youthful). Fourteen patients gave neutral responses (ie, they were no more or no less attractive). Four patients gave unfavorable responses (ie, they were less attractive after surgery). **Conclusion:** The results suggest that most patients who underwent MMA for OSAS noted moderate changes in their facial appearance. Despite significant maxillomandibular protrusion based on the postoperative cephalometric analysis, more than 90% of the patients gave either positive or neutral responses to the changes in their facial appearance. © 2001 American Association of Oral and Maxillofacial Surgeons

* Address correspondence and reprint requests to Dr Li: 750 Welch Rd, Suite 317, Palo Alto, CA 94304; e-mail: kaseyli@hotmail.com