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Original Articles

## Stability in Dental Changes in RME and SARME: A 2-Year Follow-up

Oral Sokucu<sup>a</sup>, H. Huseyin Kosger<sup>b</sup>, A. Altug Bicakci<sup>c</sup>, and Hasan Babacan<sup>c</sup>

### Abstract

**Objective:** To compare the effects of rapid maxillary expansion (RME) and surgically assisted rapid maxillary expansion (SARME) on dentoalveolar structures following orthodontic treatment, as well as stability at 2-year follow-up.

**Materials and Methods:** Two groups of subjects were used in the study. Group 1 consisted of 14 subjects (mean age, 12.7 ± 1.4 years) who were treated with RME, and Group 2 consisted of 13 subjects (mean age, 18.5 ± 2.3 years) who were treated with SARME. In both groups, all cases had a maxillary width deficiency with bilateral crossbites. Maxillary dental casts were available at three different intervals: pretreatment (T1), after orthodontic treatment (T2), and at follow-up recall (T3). Inter-molar and inter-premolar width, palatal height, and maxillary arch depth and length were assessed from maxillary dental casts.

**Results:** Treatment by RME and SARME produced significant increases in intermolar and interpremolar width and maxillary arch length after expansion (T2) ( $P < .05$ ). The amount of relapse was not significantly different 2 years after treatment ( $P > .05$ ).

**Conclusions:** Although age ranges of the patient groups are different, the dentoalveolar responses of RME and SARME were similar after orthodontic treatment. (*Angle Orthod.* 2009;79;)

**Keywords:** [Rapid maxillary expansion](#), [Surgically assisted rapid maxillary expansion](#), [Dentoalveolar changes](#), [Dental cast](#)

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<sup>a</sup> Assistant Professor, Cumhuriyet University, Department of Maxillofacial Surgery, Faculty of Dentistry, Sivas, Turkey<sup>b</sup> Assistant Professor, Cumhuriyet University, Department of Maxillofacial Surgery, Faculty of Dentistry, Sivas, Turkey<sup>c</sup> Associate Professor, Cumhuriyet University, Department of Orthodontics, Faculty of Dentistry, Sivas, TurkeyCorresponding author: Dr Oral Sokucu, Department of Orthodontics, Faculty of Dentistry, Cumhuriyet University, 58140 Sivas, Turkey ([almanoral@hotmail.com](mailto:almanoral@hotmail.com))


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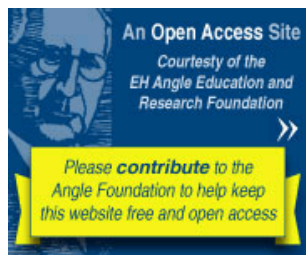
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