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A postretention study of patients presenting with a maxillary median diastema

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ABSTRACT

The purpose of this study was to assess postretention stability of maxillary midline diastema closure, to search for predictors of relapse, and to test for associations between relapse and other postretention changes. The sample consisted of 35 patients with pretreatment diastemas ranging from 0.9 mm to 3.0 mm (mean 1.4, SD = 0.5) following eruption of the maxillary canines. Data were gathered from treatment charts, study models, periapical radiographs, and cephalograms taken pretreatment, posttreatment, and 1 to 26 years postretention (mean 11.4, SD = 6.4). Measurable diastema relapse was observed in only 12 cases. The majority of the relapse was 0.6 mm or less, and maximum relapse was 3.0 mm. Abnormal frenums and/or intermaxillary osseous clefts did not appear to be risk factors for relapse, and no pretreatment predictors of relapse could be established. The only posttreatment change associated with diastema relapse was proclination of the maxillary incisors ($p < 0.01$).

KEY WORDS: Diastema, Stability, Abnormal frenum.

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