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*The Angle Orthodontist*: Vol. 61, No. 2, pp. 125–132.

## Factors related to root resorption in edgewise practice

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### ABSTRACT

In a series of 200 consecutively debanded patients receiving comprehensive orthodontic treatment with the edgewise appliance, six (3%) showed severe resorption (greater than one-quarter of the root length) of both maxillary central incisors. For other teeth, resorption of this extent occurred in less than 1% of the patients. Using a case-control design, the characteristics of 21 patients with severe resorption were compared to randomly selected controls from the case series. There were significantly more Class III patients among the severe resorption cases than would have been expected. Risk indicators for resorption that were related to treatment procedures included approximation of the maxillary incisor roots against the lingual cortical plate (odds ratio 20), maxillary surgery (odds ratio 8), and root torque (odds ratio 4.5).

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**KEY WORDS:** Root resorption, Risk indicators.