The G-Spring: A Bondable Uprighting Spring for Self-Ligating Brackets

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The introduction of interactive self-ligating brackets has offered orthodontists new mechanical options. Unfortunately, these brackets do not have vertical slots for the insertion of uprighting springs, precluding the use of traditional anterior anchorage procedures such as the Bidimensional technique. To overcome this problem and allow the use of sliding mechanics when necessary, we devised a bondable uprighting spring, which we call the G-spring.

Fabrication and Placement

The G-spring is created from .018" Australian wire* by bending two arms, one mesial and one distal to the canine bracket, and adding a spring loop distal to the canine (Fig. 1). The arms should be far enough from the bracket to allow opening and closing of the bracket clip. After insertion of the wire, the loop is activated at a 70-80° inclination to the occlusal plane (Fig. 2).

The mesial part of the spring is sandblasted and then bonded at three points: mesial, distal, and adjacent to the bracket. Bonding should be performed carefully to avoid interfering with the movements of the bracket clip. The G-spring is then activated, and a Class I force is applied for molar mesialization (Fig. 3).



Fig. 1 G-spring design, with arms bent mesial and distal to canine bracket and spring loop added distal to canine.

*G&H Wire Company, P.O. Box 248, Greenwood, IN 46142; www.ghwire.com.



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Fig. 2 G-spring inserted at 70-80° inclination to occlusal plane.



Fig. 3 A. G-spring activated. B. Class I force applied for molar mesialization.

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