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## Initial tooth movement under extraoral force and considerations for controlled molar movement

Noriaki Yoshida, DDS;<sup>a</sup> Paul-Georg Jost-Brinkmann, Dr med dent; Yoshiaki Yamada, DDS, DDSc

<sup>a</sup>Department of Orthodontics, School of Dentistry, Nagasaki University, 1-7-1 Sakamoto, Nagasaki 852, Japan, Fax: +81-958-49-7670

### ABSTRACT

Initial movement of the maxillary first molars under the application of straight-pull, cervical-pull, and high-pull headgear was measured in human subjects.

Facebow deflection can influence molar movement as the relationship of the force vector to the molar's center of resistance changes with an increase of force. The present study proposes using headgear with a combination of variable-pull headcap and short outer bow. A variable-pull headcap allows a great range in force direction. The direction of the headgear force system can be accurately determined using a short outer bow.

N. Yoshida is Assistant Professor in the Department of Orthodontics, School of Dentistry, Nagasaki University, Nagasaki, Japan

P.-G. Jost-Brinkmann is as Associate Professor with the Department of Orthodontics and Pedodontics, Policlinics North, Free University Berlin, Germany

Y. Yamada is Professor in the Department of Oral Physiology, School of Dentistry, Niigata University, Niigata, Japan

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