

Author's Response

We welcome Dr. Blechman's timely and pertinent comments on our paper, particularly as he is one of the pioneers in the application of magnetic forces to orthodontic tooth movement, as noted in the bibliography of the paper.

Dr. Blechman commented that Sm-Co magnets are optimally used for molar distalization, that is, the magnets are oriented in repulsion. In this study, the magnets were tested in both attraction and repulsion modes and, as noted, the magnetic force-magnet separation responses were indistinguishable. Consequently we do not agree with the suggestion that the use of magnets in attraction

would have unpredictable consequences. The data suggests the same predictability in repulsion mode.

The comments with regard to the biological effects of magnetic fields are very relevant. We prepared an Appendix on the biological effects of magnetic fields but space constraints prevented its inclusion here. Nevertheless, given the wide and increasing commentary in the scientific literature and the popular press on effects arising from H.T. power lines and electromagnetic effects in general, a degree of caution should always be exercised and patients advised on the safety of any devices placed in the oral cavity.

J.A. von Fraunhofer