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COVER

On the cover: Methods of accelerating orthodontic tooth movement have been investigated, both to satisfy demands for faster treatment and to decrease the risk of iatrogenic side effects. Low-level laser therapy (LLLT) is a noninvasive, nonsurgical technique, and some evidence suggests it might increase the rate of orthodontic tooth movement by up to 30%. However, the optimum wavelength, dosage, and power have not been determined. In a triple-blind randomized controlled clinical trial, Dipika Mistry and colleagues at the University of Sydney, compared rates of canine retraction between the LLLT-treated side and the control side in 22 patients. Using a GaAlAs laser diode, they administered LLLT every 4 weeks at 13 J per session. After 12 weeks, the authors found no significant difference in the rate of orthodontic tooth movement. They noted that further research into LLLT dosimetry and application schemes is needed for drawing clinical recommendations. The smiling patient on the cover is Ashley Molchany, who was treated orthodontically by Drs. Gregg and Daniel Frey, of FreySmiles Orthodontics, Schnecksville, Pennsylvania.

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