

Low level laser therapy for dentinal tooth hypersensitivity

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First published: December 1994

<https://doi.org/10.1111/j.1834-7819.1994.tb03105.x>

Citations: [75](#)

A comparative double blind study testing low level laser therapy (Gallium/Aluminium/Arsenide laser [GaAIAs]) against placebo was carried out in the management of dentinal tooth hypersensitivity. Subjects demonstrating dentinal hypersensitivity and complying with strict selection criteria were randomly assigned to an active and placebo group. Low level laser therapy was applied for one minute to both the apex and cervical area of the tooth; and reapplied at one week, two-week and eight-week intervals. Dentinal hypersensitivity was rated at each visit.

There were 28 subjects in the placebo group and 22 and 21 subjects, respectively, in the tactile sensitivity and thermal sensitivity groups. Comparisons between the groups were conducted using independent groups *t*-test. In both the tactile and thermal sensitivity groups differences between the active and placebo groups were significant from the first week and increased further in the second and eighth weeks. The mean value of thermal sensitivity decreased 67 per cent ($p < 0.001$) compared with placebo (17 per cent) and tactile sensitivity decreased 65 per cent ($p = .002$) compared with placebo (21 per cent) at eight weeks.

Results demonstrate that the GaAIAs laser is an effective method for the treatment of both thermal and tactile dentinal hypersensitivity. There were no reported adverse reactions or instances of oral irritation.