

Near infrared light therapy (Genesis pain relief light) reduces Knee Pain: an observational study

Hao Wu, M.D. MSc., Ph.D., and Paul Ziemer, M.D.

Contact Info: Hao Wu, 7 Innovation Drive, Hamilton, L9H 7H9, ON

T:289-895-8479, hwu@genesishealthlight.com

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Abstract

Objective: The purpose of this research is to determine if Genesis Health Light treatment can improve knee pain.

Hypothesis: Patients with knee pain received a treatment of exposure to Genesis light for 3 times in a week would have a pain score decrease and visual pain measurement decrease.

Method: 15 patients with knee pain were recruited through a chiropractor clinic within a month. All the patients had pain in at least one knee for the last 48 hours and lasted for more than two months. The age of the patients is from 40 to 65. The symptomatic leg was positioned under a Genesis pain relief light for 30 minutes. There into, 10 minutes for each side 'knee eye', 10 minutes for a pain point indicated by patient self. The treatment was 1 time per day and lasted for two weeks. Patients were asked to mark their pain on a 10 cm line (VAS) with left end means no pain and right end extreme pain before and after the treatment. A West Ontario and McMaster arthritis symptom evaluation form (WOMAC) was given to patients to fill in before and after the treatment to compare the score changes for pain, stiffness and functional difficulty of effected knee.

Results: 56% patients have a significant decrease of WOMAC pain score (improvement of pain>5) and VAS length (reduce of length>1 cm). 48% and 32% patients have a big improvement of stiffness and functional difficulty score (improvement of stiffness >2, and function difficulty>10), respectively. There were 87% of patients with a significant improvement in knee symptoms. The T-test of comparing means of before and after treatment is statistically significant for pain score and VAS ($p<0.001$).

Conclusion: Genesis pain relief light can significantly improve knee pain after a two week treatment interval. The near infrared light therapy has effect on more than 80% of patients.