



## Does Addition of Low-Level Laser Therapy (LLLT) in Conservative Care of Knee Arthritis Successfully Postpone the Need for Joint Replacement?

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**Abstract:** The current study evaluates whether the addition of low-level laser therapy into standard conventional physical therapy in elderly with bilateral symptomatic tri-compartmental knee arthritis can successfully postpone the need for joint replacement surgery. A prospective randomized cohort study of 100 consecutive unselected elderly patients with bilateral symptomatic knee arthritis with each knee randomized to receive either treatment protocol A consisting of conventional physical therapy or protocol B which is the same as protocol A with added low-level laser therapy. The mean follow-up was 6 years. Treatment failure was defined as breakthrough pain which necessitated joint replacement surgery. After a follow-up of 6 years, patients clearly benefited from treatment with protocol B as only one knee needed joint replacement surgery, while nine patients treated with protocol A needed surgery ( $p < 0.05$ ). We conclude low-level laser therapy should be incorporated into standard conservative treatment protocol for symptomatic knee arthritis.

**Key Words:** Knee pain; Osteoarthritis; Outcome; Laser therapy

