

Laser-assisted lipolysis for knee remodelling: A prospective study in 30 patients

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Background: Unsightly fat knees are a frustrating aesthetic deformity exacerbated by genetic predisposition and resistance to diet. This article reports our experience with laser-assisted lipolysis (LAL) in knee remodelling.

Methods: A total of 30 patients were treated for unsightly fat knees with LAL. The 924/975-nm diode laser used in this study consists of two lasers, one emitting at 924 nm and another at 975 nm. Previous mathematical modelling suggested that 0.1 kJ was required in order to destroy 1 ml of fat, in dual emission mode at 924/975 nm. Patients were asked to fill out a satisfaction questionnaire. Ultrasound was used to measure the fat thickness pre-and post-operatively.

Results: Other than one patient who developed mild hyperpigmentation that disappeared after 2 months, there were no complications in the series. Pain during the anaesthesia and discomfort after the procedure were minimal. Return to normal activities never took longer than 2 days and mean downtime was 0.92 days. Of the 30 patients, 29 would recommend this treatment. Overall satisfaction was high with both patients and investigators and was validated by ultrasound measurements demonstrating a systematic decrease in fat thickness.

Conclusion: LAL in knee remodelling is a safe and reproducible technique, particularly appreciated by patients. The procedure allows for a reduction in the amount of adipose deposits while providing concurrent skin contraction.