



LASERS

COMBINED THERAPEUTIC STRATEGIES FOR KELOID TREATMENT

Young In Lee⁽¹⁾ - Jihee Kim⁽¹⁾ - Chae Eun Yang⁽²⁾ - Jong Won Hong⁽²⁾ - Won Jai Lee⁽²⁾ - Ju Hee Lee⁽¹⁾

Yonsei University College Of Medicine, Department Of Dermatology And Cutaneous Biology Research Institute, Seoul, Republic Of Korea⁽¹⁾ - Yonsei University College Of Medicine, Department Of Plastic And Reconstructive Surgery, Seoul, Republic Of Korea⁽²⁾

Introduction: Recent advances in keloid management favor the administration of combination therapy over monotherapy.

Objective: We evaluated the safety and efficacy of combination therapy to treat keloids using fractional lasers, superficial cryotherapy, and intralesional triamcinolone injections.

Methods and Materials: We performed a retrospective observational study involving 35 Koreans with keloids. Each patient underwent treatment using the 1550 nm non-ablative fractional erbium-glass laser, followed by the 10,600 nm ablative fractional carbon dioxide laser. Laser treatment was immediately followed by the administration of superficial cryotherapy and intralesional triamcinolone injections (10–20 mg/mL). Scar improvement and patient satisfaction were assessed using the Vancouver Scar Scale (VSS) score and the 7-point patient self-assessment score.

Results: The mean total and subcategory VSS scores (pigmentation, vascularity, pliability, and height) showed statistically significant improvement. The height and pliability subcategories showed the most significant improvement, as well as the quickest response to the combination therapy. The patients reported remarkable improvement in itching, pain, and limitations of motion after a single combination therapy session. Twenty patients were followed up for 1 year after the discontinuation of the combination treatment, and the recurrence was observed only in one patient. No significant adverse effects were observed throughout the follow-up periods.

Conclusion: Combination keloid therapy using fractional lasers, superficial cryotherapy, and intralesional triamcinolone injections is safe and more effective than individual monotherapies.

