70

COMPARISON OF STARLUX LUX-G WITH LONG PULSED PDL, LONG PULSED KTP AND TRADITIONAL IPL FOR TREATMENT OF FACIAL TELANGIECTASIAS

Camilia Miranda and Vic Narurkar

Bay Area Laser Institute, UC Davis Medical School, San Francisco, CA

Background/Objectives: Traditional pulsed light sources have not been as effective in the treatment of facial telangiectasias as single wavelength lasers. Limitations have included fluence, adequate cooling and lack of selective filtration. The LuxG Starlux handpiece utilizes dichroic filters, bimodal peaks for optimal oxyhemoglobin absorption, continuous contact sapphire cooling and high fluences. This study was undertaken to compare the LuxG with traditional vascular lasers and intense pulsed light for facial telangiectasias.

Study Design/Materials & Methods: 88 patients were enrolled in a prospective, single blind study. Facial telangiectasias on the same patient were treated with Starlux Lux G, V Beam laser at subpurpuric fluences, Versapulse KTP laser and Quantum IPL at 560 and 590 nm filters. Patients were followed for six months following their final treatment. The blinded investigator performed the photographic analysis and grading of improvement.

Results: The Starlux Lux G provided equivalent clearance of discrete facial telangiectasias compared with V Beam and Versapulse KTP and superior treatment to Quantum IPL. Mean number of treatments were 3.2 with persistent clearance at 6 months. The Starlux Lux G provided better clearance of diffuse telangiectasias and erythema compared to V Beam, Versapulse and Quantum IPL. Mean number of treatments were 4.8 with persistent clearance at 6 months.

Conclusions: The Starlux Lux G provides equivalent clearance of facial telangiectasias compared with LP pulsed dye and KTP laser and superior clearance of diffuse telangiectasias and erythema compared to LP pulsed dye laser and KTP laser and superior clearance of both discrete, diffuse telangiectasias and erythema compared to conventional intense pulsed light. We propose the mechanisms to be based on greater selectivity of filtrations, bimodal peaks of absorption, superior contact cooling allowing for higher fluences and larger spot sizes.