

out. The 595 nm PDL was used on 9 patients and the 585 nm on two; the clinical end point being purpura. All experienced improvement in the telangiectasias. The mean number of treatments was 4.3 (2–9), with an average fluence of 4.2 (585 nm) and 7.8 (595 nm) Joules (4–8 J), 10 mm spot size, and pulse duration range of 3 to 6 milliseconds. The mean percent clearance was 72.7% (50–90%). No adverse effects were noted even with breast implants or flaps. All patients reported a QoL improvement, including improved confidence and aesthetic appearance. One patient commented that she was now able to change in front of her partner without embarrassment.

**Conclusion:** The PDL is efficacious and safe for treatment of radiation-induced breast telangiectasias even on reconstructed breasts. Clinical and QoL improvement were noted. Multiple treatments are required for greater than 50% clearance. Akin to a surgical scar, telangiectasias serve as a reminder of cancer. Some patients stated the telangiectasias affected intimate relationships. To better elucidate the treatment's QoL effects, a prospective study was designed and instituted using validated outcome measures.

## #17

### TREATMENT OF FACIAL ERYTHEMA IN SKIN TYPES I-IV USING COMBINATION LONG-PULSE AND Q-SWITCHED 1064 nm Nd:YAG LASERS

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**Background:** Facial erythema is a common concern for many patients. There are both laser and IPL approaches for therapy. Patients with higher skin types are at increased risk of adverse outcome using some of these systems.

**Study:** Eleven patients with skin types I-IV who presented with facial erythema were treated with combination 1064 nm long-pulse and Q-switched lasers. A total of 21 sites were treated and evaluated. Evaluation was based on comparison of baseline and post treatment pictures. Two blinded evaluators were asked to score the severity of the erythema on a scale of 1–4 with one being mild and four being severe erythema. Percentage of improvement was measured on a scale of 0–100%. The evaluations were done on an average 4 months from the last treatment session.

**Results:** Immediate reaction was limited to transient erythema and occasional edema. All patients responded with a reduction of erythema with a mean of 74%. No adverse effects were noted.

**Conclusion:** Combination treatment with the long pulse and the Q-switched Nd:YAG lasers is an effective method for treatment of facial erythema. Patients with Skin Types I–IV can be safely treated for their facial erythema.

## #18

### TREATMENT OF SPIDER VEINS OF THE LOWER EXTREMITY WITH A NOVEL 532 nm KTP LASER

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**Background:** Lower extremity spider veins and mottled telangiectasias are a common condition that is often difficult to

treat. This study investigated spider vein treatment with a new, high-power, 532 nm Nd:YAG, KTP laser with contact cooling.

**Study:** This was a single-center study of twenty female subjects with Fitzpatrick skin types I-III and mean age of 48 (32 to 66). A dual 532/1064 nm laser (Excel V, Cutera, Brisbane, CA) was used at 532 nm wavelength with spot size of 5 mm, fluences of 13 to 15 J/cm<sup>2</sup>, and pulse duration of 40 ms. A total of 79 separate areas with linear and branching spider veins of 0.5 to 1 mm in diameter were treated. Two treatments were performed 12 weeks apart. Standardized photographs were taken at baseline and 3 months following the final treatment. Treatment effect was assessed by two independent physicians reviewing digital photographs in a blinded fashion using a 5 point improvement scale (0 = 0%, 1 = < 25%, 2 = 26–50%, 3 = 51–75%, 4 = 76–100%). Pain levels (0–10 numeric rating scale) and adverse events were recorded. **Results:** Based on blinded assessments of photographs by two independent reviewers, treatment resulted in a median improvement of 2.5 (one-sample Wilcoxon signed rank test, 95% CI: 1.9–2.9, p = 0.000). The reviewers were highly consistent (inter-reviewer reliability, kappa of 0.85), and highly accurate (inter-reviewer validity, kappa of 0.85) in identification of the pre- and post-treatment photos. Eighty-one percent of subjects had “moderate” to “very significant” improvement at 24 weeks. There was one case of post-inflammatory hyper-pigmentation (1.5%). All subjects tolerated the treatments extremely well (mean pain score of 2.9/10).

**Conclusion:** Treatment of spider veins of the leg with a novel 532 nm KTP laser was found to be safe and effective, with minimal discomfort and side effects in Fitzpatrick skin types I–III.

## #19

### BLEBS BE GONE: SINGLE TREATMENT RESOLUTION WITH A NOVEL 1064 nm Nd:YAG FOR VASCULAR BLEBS WITHIN PORT WINE STAINS

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**Background:** If left untreated, port wine stains (PWS) can thicken, darken and develop nodules or “vascular blebs” (blebs). These lesions are not only cosmetically unappealing, but can also spontaneously bleed. While pulsed dye lasers (PDL) and intense pulsed light devices (IPL) have been shown to be exceedingly safe and effective in the general treatment of PWS, they are not successful in treatment of these subsequently formed nodules. We evaluated a novel high energy 1064 nm Nd:YAG laser with a sapphire peltier cooled tip in the treatment of PWS-related vascular blebs.

**Study:** Single-center study of fourteen men and women, average age of 53.17 years (42–62 years), Fitzpatrick Skin Types I–III, with a clinical diagnosis of PWS and blebs. Subjects received treatment with the Excel V 532/1064 nm KTP/Nd:YAG enhanced cooling system (Cutera, Brisbane, CA), allowing for safer delivery of higher energies. We utilized the 1064 nm wavelength, 4 mm spot size, fluences of 110–150 J/cm<sup>2</sup>, and pulse width of 20–55 ms. Treatment areas were clinically assessed for overall clearance, as well as improvement in texture and appearance.

**Results:** Thirteen subjects had PWS of the head and neck, half of which had periorbital involvement, ranging in size from 2 to 400 sq cm (average 86.12 sq cm). One subject had arm and hand