## Nd:YAG 1064 nm Laser Treatment of Periocular Veins

## Ashraf Badawi

Laser Institute, Cairo University, Cairo, Egypt

## SUMMARY

Prominent periocular veins, primarily of the lower eyelid, are a relatively frequent cosmetic problem. Spider veins usually appear as fine irregular red lines on the nose, cheeks and the side of the face. The larger reticular veins can be 2-3 mm in diameter and appear greenish or blue. They are most often found along the cheekbone under the eye and at the temple areas. Smaller spider veins and larger reticular veins are the most often treated facial veins.

Reported treatment techniques include ambulatory phlebectomy, sclerotherapy, and laser therapy. In 2002, Eremia and Cindy published the first prospective study to evaluate a variable pulse width 1064 nm Nd:YAG laser for the treatment of facial telangiectasia and larger periorbital reticular veins [1].

To evaluate the long-term efficacy and safety of long pulse Nd:YAG lasers in the treatment of periocular veins, 22 patients were included in our study. The veins were treated with a 1064 nm Nd:YAG laser using a 7 mm spot size, 25–30 ms pulse width, and fluences of 120–130 J/cm<sup>2</sup>. If the vein was still apparent after 3 weeks, a second session was given using the same parameters. Improvement was evaluated one year after the first session by three independent evaluators. In all tested patients, complete clearance of the periocular veins was achieved with minimal incidence of side effects.

1064 nm Nd:YAG laser therapy presents an effective, safe method and is an excellent tool for the treatment of periocular veins [2].



Fig.1: Periocular veins before and one year after treatment with Nd:YAG laser.

## REFERENCES

- Eremia S, Li CY (2002) Treatment of Face Veins with a Cryogen Spray Variable Pulse Width 1064 nm Nd:YAG Laser: A Prospective Study of 17 Patients. Dermatologic Surgery 28: 244– 247.
- Badawi A (2013) Nd: YAG 1064 nm laser in the treatment of periocular veins. Journal of the Egyptian Women's Dermatologic Society 10: 5–9.

The intent of this Laser and Health Academy publication is to facilitate an exchange of information on the views, research results, and clinical experiences within the medical laser community. The contents of this publication are the sole responsibility of the authors and may not in any circumstances be regarded as official product information by medical equipment manufacturers. When in doubt, please check with the manufacturers about whether a specific product or application has been approved or cleared to be marketed and sold in your country.