

POST LASIK

Laser proves safe and effective for epithelial ingrowth after LASIK

by Dermot McGrath in Paris

Post-LASIK epithelial ingrowth can be effectively treated using an Nd:YAG laser, a new French study suggests.

“Nd:YAG treatment is efficient and is very simple to put in place. It also has the advantage of posing no risk of secondary iatrogenic complications and it is very well tolerated by the patients. The results thus far are very promising indeed and it gives us a viable alternative or complement to conventional treatments for the condition,” said Patrick Desprez MD.

Addressing delegates attending the French Implant and Refractive Surgery Association (SAFIR) annual meeting, Dr Desprez in private practice in Nice, France, said that the Nd:YAG laser has become his treatment of choice for dealing with troublesome cases of epithelial ingrowth.

Although relatively rare, the incidence of epithelial ingrowth is believed to vary considerably depending on the surgical techniques used, the method used to create the flap and whether the LASIK is a first-time procedure or a retreatment. The ingrowth may take weeks or months to become apparent and may cause blurred or distorted vision or flap melt if left untreated.

The traditional treatment for epithelial ingrowth is to surgically re-lift the flap and mechanically remove the epithelial cells underneath it. The exposed stroma and the intern layer of the flap is then treated – sometimes needing an application of dilute alcohol solution to prevent epithelial cells from regenerating – and the flap is replaced.

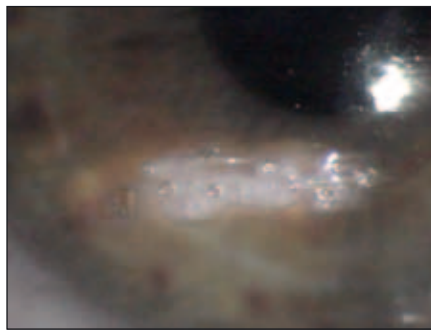
While this traditional method is usually effective, it is also associated with a high risk of recurrence of epithelial ingrowth as the stromal bed has once again been exposed as it was during the original LASIK procedure. Re-lifting a flap that has adhered to the underlying cornea as part of the postoperative healing process can also be problematic.

By contrast, early intervention with the Nd:YAG laser at the first manifestation of mild-to-moderate epithelial ingrowth provides a straightforward and effective means of tackling the problem, restoring lost visual acuity and preventing the development of more serious problems, said Dr Desprez.

Discussing the surgical steps, Dr Desprez said that the eye is first prepared with topical anaesthesia and then the Nd:YAG laser is



Epithelial ingrowth before YAG treatment



Immediate view after YAG treatment

Courtesy of Patrick Desprez MD

focused on the level of the epithelium of the cornea, and then the beam is defocused at 125µ backwards in order to reach the area of epithelial ingrowth.

“We set the laser at an energy level that is as weak as possible, usually in the range of about 0.6 mJ. to 0,9 mJ. The goal is to obtain a bubble in the interface, a little bit like we used to do with argon laser trabeculoplasty. When we see a bubble in the interface it means that the laser is focused on the right area and also that the energy being directed is sufficient to remove the epithelial ingrowth,” he said. The treatment is started in the centre of the area of epithelial ingrowth, then enlarged gradually towards periphery. If a fistule exists with the periphery of the flap, it is important to seal it with YAG spots also.

Once the Nd:YAG session has ended, the patient is fitted with a contact bandage lens and given a course of antibiotic and AINS drops for the immediate postoperative period. The epithelial ingrowth usually disappears three to four weeks after treatment, although in some cases a second Nd:YAG might be necessary to remove the ingrowth.

contact

Patrick Desprez – docteur-desprez@orange.fr

icare
tonometer

XXIX CONGRESS OF THE ESCRS

Glaucoma Day 16th of September
Vienna, Austria

ICARE SATELLITE LUNCH SYMPOSIUM

Friday 16th of September
12.35-13.35 room Lehar 4

IOP HOME MONITORING

Dr. Sanjay Asrani

Associate Professor of Ophthalmology
Duke Eye Center, Durham, NC, USA

Limited seats available.

Please register online at: www.es CRS.org

Visit our stand #B216 and get a demo.

WIN AN ICARE SYSTEM



ICARE SYSTEM: ONE, LINK + PRO

Icare PRO tonometer is the ophthalmologist's standard device for high accuracy clinical use.

Icare ONE tonometer is for easy IOP home monitoring for Glaucoma Patients.

Icare LINK software completes new Icare product group of Icare PRO and ONE tonometers by offering a perfect tool to analyze measurement data, treatment efficiency and long-term progression in Glaucoma treatment.



ESCRS MEET THE EXPERT AT ICARE STAND #B216

Sunday 13:00 - 15:00 Dr. Sanjay Asrani
Monday 13:00 - 15:00 Dr. Elie Dahan