Inverted Bevel-in Side Cut Reduces the Incidence of Displaced LASIK Flaps

A new study conducted by Dr. Dean Dornic of the Laser Eye Center of Carolina demonstrated that the use of an inverted bevel-in side cut reduces the risk of flap displacement in the first 24 hours after LASIK eye surgery.

Raleigh, NC (PRWEB) February 13, 2012 -- Dr. Dean Dornic, medical director of the Laser Eye Center of Carolina located in Cary, NC recently published the results of his study on one of the more disconcerting and potentially vision threatening immediate post-operative complications seen soon after lamellar refractive surgery: displaced or wrinkled LASIK flaps. Corneal distortion which results from LASIK flap striae and wrinkles from incomplete resolution of the problem can negatively impact results and patient satisfaction.

Obviously, methods to reduce or eliminate LASIK flap displacement are desirable. Methods described to date include avoiding overly aggressive irrigation of the flap, drying after replacement of the flap and the use of goggles and/or shields. The use of bandage contact lenses have been tried but have been found by some investigators to lead to a higher rate of displacement and wrinkles.

Dr. Dornic decided to do a study to determine if an inverted bevel-in side cut flap resulted in a lower incidence of slipped or displaced flaps in his patients at the eye center. Laboratory studies have previously suggested that the use of an inverted bevel flap leads to a more stable flap more resistant to trauma. Dornic decided to investigate if the inverted bevel-in flap edge would show a clinical advantage in terms of displaced flaps during the first 24 hours after LASIK. He compared the incidence of flap displacement in a group of patients utilizing an IntraLase iFS model laser and a 120 degree inverted bevel-in side cut flap with two groups of patients he had previously performed LASIK on before acquiring his iFS model laser: one group was a microkeratome group and the second was a group on which an earlier model femtosecond laser in which a 70 degree beveled flap was utilized.

Dornic found that the inverted bevel-in flaps yielded a three fold lower incidence of flap displacement from the 70 degree beveled femtosecond flap group and a four fold lower incidence from the microkeratome group.

"The experience of a patient suffering from a slipped flap soon after their LASIK procedure is nowhere near as positive as one who's immediate post-operative course is uneventful. Also, quality of vision suffers even with relatively minor appearing corneal striae. It is imperative that every effort be made to prevent slipped flaps. An inverted bevel flap is one tool that is effective in reducing the incidence of flap displacement," according to Dr. Dornic.

Dr. Dornic will be presenting his findings at the World Ophthalmology Congress in Abu Dhabi later this month.

###
Contact Information
Dr. Dean Dornic  
Laser Eye Center of Carolina  
http://www.visionauthorities.com  
919-467-9955

Online Web 2.0 Version
You can read the online version of this press release here.