Laser vision correction beyond LASIK—“RELEX SMILE”

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From past 2 to 3 decades widely spoken refractive treatment option across the world is LASIK; after invention of newer possibilities by Femto second laser applications I present to you all Laser flap less laser vision correction beyond LASIK “Relex Smile”

RELEX SMILE (Small incision lenticule extraction) is flapless corneal refractive surgery only femtosecond laser used to complete the refractive surgery on intact cornea, potentially reducing surgical time and side effects. SMILE could potentially replace the current, widely practiced LASIK. The three main steps involved in Relex smile are first docking then Lenticule creation on intact cornea and last extraction of lenticule through a small access incision. Docking procedure performed after application of topical anesthesia, standard sterile draping, and insertion of the speculum, the patient’s eye will be centered and docked with the curved interface cone before application of suction fixation. Then Femto second laser will then be activated for photo-dissection in the following sequence: first the posterior surface of the refractive lenticule (spiral in), Then the lenticule border is created. The anterior surface of the refractive lenticule (spiral out) is then formed which extended beyond the posterior lenticule diameter by 1 mm to form the anterior cap. Followed by an access rim cut of 4mm. I use the following FS laser parameters: 120 μm flap thickness, 7.0 mm cap diameter, 6.0 mm optical zone of lenticule, 170 μJ of power with side cut angles at 90°. A superior access cut of 4mm. After the suction is released by manually the refractive lenticule is separated from the stromal bed then lenticule is then grasped with non-toothed serrated forceps through the small incision and extraction completed. Post operatively medication given for a period of 4 weeks and lubrication eye drops given for a period of 12 weeks.

Biography
Dr. Rajesh completed his under graduation from India and post graduation from university of London. Presently as director of Dr. Rajesh Hospitals, Bangalore and Medical Director of Dr. agarwal’s eye hospital with Dr. Rajesh eye hospital Bangalore. Dr. Rajesh is one among top eye surgeons who perform SMILE procedure in India.

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