TransPRK-A no-touch procedure to refractive surgery: Two years study

Introduction: The TransPRK (transepithelial photo refractive Keratectomy) by Amaris 750S a SCHWIND technology is a refractive procedure with no-contact surgery. Corneal epithelium is removed by the laser without manual interference. It brings more acuity and perfect de-epithelization.

Method: We treated and studied in three years, 452 eyes of 224 patients, 96 males and 128 females. The average degree of spherical refraction was -3.70 DE and cylindrical refraction was -0.75. We used 1% tetracaine hydrochloride as anesthesia and mitomicin-c 0.01% for 25 minutes or more; contact lens after the application; and drops of moxifloxacin hydrochloride 0.5 for antibiotic therapy. In the post-operatory we used moxifloxacin hydrochloride 0.5-4 drops a day for 7 days, tretamol cetorolac 0.45%-4 drops a day for 7 days and carrême sodium and sodium hyaluronate for 1 month.

Results: We had 96.3% with 20/20 in the end of two eyes of study and 6 eyes presented a little manifestation of haze. 93% had epithelial regeneration in 3 days after surgery and all patients in 5 days. 96.3% showed a spherical refraction target of 0.48 and a cylindrical refraction of 0.5 degrees. The corneal architectural structure became preserved and we had to pay attention when we had diameters below 9.5 mm which may occur due to overcorrection in the results. The results modified with a little between 12 to 24 months. The dry eye occurred in 72% of patients in the first month and kept with the same incidence of all population after 3 months of the surgery.

Conclusion: The TransPRK showed an excellent and safe procedure with 96.3% of good results of myopia and astigmatism. We need to observe the development of dry eye in the 3 months of post–operatory.

Biography

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