Dr. Greg Moloney, Ophthalmologist

The SmartSurfACE Laser Procedure verses PRK

There are several types of laser refractive procedures, including PRK, LASIK, the SmartSurfACE laser procedure, and SMILE. Photo refractive keratectomy, or PRK, is the procedure in which the front surface of the cornea is directly sculpted into a more desirable shape by an excimer laser after the doctor removes the outer skin or epithelium.

In the early 1990s the epithelium was removed by scraping or by applying topical alcohol. This older technique resulted in slower healing and more discomfort after the procedure. The slower healing and discomfort issues of PRK are eliminated with the latest technology in laser refractive procedures, the smart surface laser procedure, or SLP. The slower healing and discomfort issues of PRK have been greatly reduced with newer versions of lasers which remove the epithelium without the need for alcohol or scraping.

In conjunction with Schwind eye tech solutions, Pacific Laser Eye Center has developed Smart Pulse Technology, which has evolved into the SmartSurfACE laser procedure. SmartSurfACE is a completely no touch procedure, no scraping, no cuts, no incisions, and no alcohol. The smart surface laser operates at a high frequency of tissue removal. It tracks your eye with a seven directional ocular movement tracking system. This results in perfectly centered treatments, even if you have difficulty holding still during the procedure.

Treatment time is extremely efficient, at approximately 40 seconds per eye and slightly longer for higher prescriptions. This one step, no touch, trans epithelial procedure offers higher safety compared to some other versions of laser eye surgery. There is no need to create a flap and no need to create an incision with this procedure. The risk of problems such as ectasia, where the cornea may thin or bulge and dry eye, is reduced with this version of laser refractive surgery.

SmartSurfACE is suitable for patients with thinner corneas or complex corneal topographies such as keratoconus. The advanced laser allows us to treat almost all levels of myopia in the safest manner possible. If you are considering laser refractive surgery, reach out to us at Pacific Laser Eye Center to discuss whether the SmartSurfACE, no touch laser procedure is the right choice for you.