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Both PRK and LASIK are being routinely used to treat myopia and myopic astigmatism. LASIK was the most popular technique because of its wow factor, stability, comfort, and faster healing, but there has been a resurgence of PRK and surface ablation due to the rare but serious complications of corneal post-LASIK ectasia and flap complications. PRK has seen a resurgence in popularity due to many factors such as small Gaussian beam profile in high-speed lasers, which give smooth ablations, and the use of mitomycin C which have reduced the incidence of haze. Also, PRK is technically a much easier procedure to perform and less demanding surgically than LASIK.

In our practice, we use both techniques and select the procedure depending upon corneal topography and thickness, myopic error, the condition of the epithelium and surface, and patient activity. For patients with lower myopia (< 5 D spherical equivalent), thinner or borderline corneal thickness, basement membrane dystrophies or epithelial irregularities, and whose activities involve contact sports, we prefer to do PRK over LASIK.

Our preferred technique of surface ablation is trans PRK, where the laser (Schwind Amaris) ablates the epithelium and stroma in one go, followed by application of 0.02% Mitomycin C for 20 seconds routinely. This technique is very easy to perform even by novice surgeons and residents and has a very low risk of complications with good clinical outcomes. We also compared trans PRK and alcohol assisted PRK (LASEK) in the contralateral eyes of the same patient. In this randomized, prospective clinical study, 52 eyes of 26 patients with low myopia were treated contralaterally with T-PRK and A-PRK and followed up for 6 months. The time taken for performing T-PRK was almost half of that with A-PRK, with a faster epithelial healing in the T-PRK eyes. Pain score, visual acuity, contrast sensitivity, glare, halos were similar and minimal in both groups. Though the visual and refractive outcomes were comparable between the two techniques, T-PRK is faster and easier to perform with surgical skill, faster epithelial healing, and an all-laser single-step procedure. The main drawbacks of surface ablation today are pain factor, longer use of postoperative steroids with their attendant risks, and the occasional incidence of haze and regression. PRK scores over LASIK in being a safer procedure while being easier to perform.

