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**Outcomes of Corneal Refractive Surgery Performed By a Resident Physician at  
Wills Eye Hospital**

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**Purpose**

To evaluate and compare the outcomes of photorefractive keratectomy (PRK) and laser-assisted in situ keratomileusis (LASIK) performed with resident physicians as the primary surgeons.

**Methods**

Retrospective review of all corneal refractive surgery cases performed by a resident physician from 1/2018 - 5/2019 at Wills Eye Hospital. Inclusion criteria were minimum 3 month post-operative follow-up, pre-operative spherical equivalent of +3.00 to -11.00 diopters (D), astigmatic error of  $\leq 3.00$  D, and intention to provide plano post-operative refraction. Outcomes were uncorrected distance visual acuity (UDVA) and complications.

**Results**

A total of 91 eyes underwent surgery of which 81 eyes met inclusion criteria; 54 eyes underwent PRK and 27 eyes underwent LASIK. Surgeries were performed by 12 different residents over a 14 month time period. At three months post-operatively, mean logMAR UDVA for all patients was -0.016 (Snellen 20/19.3). Mean visual acuity was better after LASIK than PRK (-0.042 vs -0.003, Snellen 20/18.2 vs 20/19.9,  $p=0.01$ ). A greater percentage of eyes achieved UDVA of 20/20 or better after LASIK compared to PRK (100.0% vs 87.0%;  $P=0.05$ ). All eyes achieved UDVA of 20/30 or better. One eye had mild haze post-PRK, one patient had bilateral DLK, and 7 patients developed symptomatic dry eye.

**Conclusion**

Outcomes after corneal refractive surgery performed by residents under the supervision of an attending surgeon are quite good. This review found that patients undergoing LASIK had better UDVA at 3 months post-operatively than those undergoing PRK. There was a low rate of complications, none of which were visually significant.